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ABSTRACT

This report of the Initial Planning Meeting of the Asian Centre of Educational Innovation for Development describes the beginning of a series of activities aimed at improving in-service primary teacher education in the countries involved. Participating countries include Bangladesh, India, Indonesia, Malaysia, Nepal, Papua New Guinea, Republic of Korea, Thailand and the Philippines. Brief reviews of the status of in-service primary teacher education and of the research, evaluation, and development activities in the field are presented for each of the nine countries. Special attention is given to the Philippines status study which investigated the process of formulating designs for in-service education. In addition, evaluation procedures employed by the participating countries are summarized. Guidelines on the format of national status studies are given in addition to guidelines for the development of alternative schemes for improving in-service primary teacher education. Appendixes include a list of participants and the evaluation questionnaire used for the Initial Planning Meeting. (Author/JA)

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Asian Programme of Educational Innovation for Development **APEID**

IN-SERVICE PRIMARY TEACHER EDUCATION

Work Plan of a Joint Innovative Project
proposed by a Regional Meeting
Quezon City, Philippines, 24 August - 4 September 1980

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The Initial Planning Meeting was organized by
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and
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Bangkok, Thailand
in co-operation with the Unesco National Commission of the Philippines

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Chapter One

INTRODUCTION

Background

In accordance with the recommendation of the Sixth Regional Consultation Meeting on the Asian Programme of Educational Innovation for Development held in Bangalore, India, 22-30 April 1979, the Asian Centre of Educational Innovation for Development is organizing a series of activities under the Joint Innovative Project for In-service Primary Teacher Education during 1980-1981.

The Initial Planning Meeting starts the series of activities with the end in view of developing a design for studying the current status, in the countries involved, of in-service primary teacher education, and the methodologies of evaluation in use, leading to suggestions for the improvement of in-service primary teacher education.

It is envisioned that after the Initial Planning Meeting the participating countries will undertake their respective national status studies. The second meeting will then be organized to explore the state of the art and develop methodologies of evaluation and improvement of in-service primary teacher education programmes. It is further envisaged that workshops will be held at the national level to appraise and refine the studies and to prepare a handbook of design with emphasis on built-in research and evaluation. The final meeting will then be convened to synthesize the findings.

Objectives

Specifically, the objectives of the Initial Planning Meeting were as follows:

1. Review and examination of national efforts and initiatives in improving and expanding in-service education, and national plans and methodologies of research and evaluation, to be conducted in the light of preliminary studies brought by the participants;
2. Consideration of the national status study of the Philippines;
3. Development of alternative schemes for evaluating and improving in-service education for primary teachers; and

In-service primary teacher education

4. Development of alternative schemes for creating and expanding knowledge base, and for design and introduction of changes, on a continuing basis, in in-service education for primary teachers in the participating member countries.

Participation

A total of 29 participants from nine participating countries attended the Meeting; three each from Bangladesh, India, Indonesia, Malaysia, Nepal, Papua New Guinea, Republic of Korea, and Thailand; and five from the Philippines. The Asian Centre of Educational Innovation for Development (ACEID), Unesco Regional Office for Education in Asia and Oceania, Bangkok, was represented by a specialist in new methods in teacher education. The list of participants is presented in Annex II.

Opening session

Dr. Paz G. Ramos, Dean of the College of Education, University of the Philippines, welcomed the participants. She emphasized the significance of the Meeting and the role of the participants in sharing their country experience and efforts in in-service education for primary teachers. Dr. H.K. Paik, Specialist in New Methods in Teacher Education, ACEID, explained the rationale and objectives of the Meeting. The keynote address was delivered by Dr. Abraham I. Felipe, Deputy Minister of Education and Culture, the Philippines. To stress the need for improving in-service primary teacher education, he cited the case of the Philippines where results of the Survey of Outcomes of Elementary Education, a nation-wide evaluation, revealed some shortcomings of primary education in the Philippines. He also pointed out the inadequacy of provisions for the development of awareness and understanding of national purposes in the learners, implying the need to include this dimension in in-service education activities.

Election of officers of the Meeting

After the orientation talk given by Dr. Paz G. Ramos, the participants elected a Chairman, three Vice-Chairmen, and three Rapporteurs. Elected were: Chairman, Dr. Paz G. Ramos (Philippines); Vice-Chairmen, Mr. Mohammad Nurul Islam (Bangladesh), Dr. Atma Prakash (India), and Dr. Kedar Nath Shrestha (Nepal); Rapporteurs, Dr. D.N. Abrol (India), Mr. Goh Keat Seng (Malaysia), and Dr. Edilberto P. Dagot (Philippines).

After four plenary sessions, the participants divided themselves into three groups to work on evaluation of in-service education for primary teachers, guidelines on the format of national studies, and alternative schemes for improving in-service education

for primary teachers. Each group had a Chairman and a Rapporteur. The list of members of the three groups and their respective Chairmen and Rapporteurs are given in Annex II.

Activities of the Meeting

To achieve the objectives of this Meeting, the following activities were undertaken:

1. Presentation and discussion of national preliminary status reports by the participants;
2. In-depth consideration of the national status study of the Philippines;
3. A field visit to Taytay Elementary School in Taytay, Rizal, to observe the in-service education programme jointly undertaken by the University of the Philippines and the Division of Rizal;
4. An input session where two resource persons from the College of Education and one from the Science Education Center, University of the Philippines shared their experiences and insights in evaluating an in-service education project, in strengthening the research and development components of in-service education programmes, as well as in formulating the research format for national studies;
5. Group sessions to work on: (a) evaluation of in-service education for primary teachers; (b) formulation of guidelines on the format of national studies; and (c) development of alternative schemes for improving in-service education for primary teachers;
6. Preparation and presentation of group reports; and
7. Preparation of the draft final report.

The Meeting considered adoption of the draft final report in two plenary sessions. The Final Report was adopted with modifications at the concluding session.

Chapter Two

REVIEW OF NATIONAL PRELIMINARY STUDIES

This chapter presents a brief description of in-service primary teacher education as it obtains in the participating countries. The bases of these descriptions are reports of preliminary status studies submitted by the participants subject to modification in emphasis on details regarding different points of elaboration. This was consequent to the presentation and ensuing discussions held during the general meetings of the group. These brief reports present, aside from the status of in-service primary teacher education, an idea of the system of evaluation of these programmes, research and development activities in the field, and suggestions for improvement of in-service education.

BANGLADESH

Introduction

In Bangladesh, there are 182,800 primary school teachers employed in government and non-government primary schools. Of these, 8.93 per cent are non-matriculates (less than 10 years of general schooling), 56.33 per cent are matriculates or Secondary School Certificate holders (10 years of general education), 27.70 per cent are Higher Secondary Certificate holders (12 years of general education) and only 9.04 per cent are university graduates. About 72 per cent of these teachers had professional training.

Institutions for primary teacher education

The responsibility of providing professional education to primary school teachers rested with institutions like the Guru Training Schools (GT schools), Primary Training Centres (PTC), Primary Training Institutes (PTI), etc. The courses offered by these institutions are for pre-service education. Over the years the same courses have been offered to in-service primary school teachers who have been seeking admission on their own or are being sent for professional education. Presently, 50 PTIs in the country (47 government and three private) are offering such pre-service and in-service teacher education programmes for one year. Moreover, one of the teacher training colleges offers PTI courses exclusively for women teachers who prefer to take up such courses in an institution exclusively for females.

During the last few years the intake capacity of the PTIs has

been raised from 100 to 200 teachers each. Presently 80 per cent of the available places in the PTI are kept reserved for the in-service education of untrained primary school teachers. It is expected that in the near future, there will not be any need for such a reservation and the PTI courses will be extended to a two-year period for pre-service education.

Short-term in-service primary teacher education

Several agencies offer short-term in-service primary teacher education. The Bangladesh Education Extension and Research Institute (BEERI) was established in 1960 with the objective of creating a base for educational research and in-service training of teachers especially at the secondary education level. The Refresher Course Training Centres (RCTC) offer two-month refresher courses to primary school teachers. The Institute of Education and Research (IER) of Dacca University has started conducting research and in-service education in the field of primary education. In addition, the Audio-Visual Education Centre attached to BEERI offers special in-service training to different categories of teachers (including primary school teachers), on the use and development of indigenous audio-visual educational materials and teaching aids.

Academy for Fundamental Education

One of the notable events in the field of in-service primary teacher education in Bangladesh is the establishment of the Academy for Fundamental Education (AFE) in 1978. The objective of the Academy is to provide professional training to the primary training Institute staff, primary school inspectors and administrators,* and others involved in organizing teacher training programmes. The Academy also provides the essential link between curriculum development and other related activities in the primary education sector, the primary training Institutes, and the inspectorate. It is a forum where varied problems of primary education are looked into and discussed. It is expected that the Academy will go a long way in fulfilling its objectives and in initiating various innovative approaches.

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* Thana Education Officers (TEOs) and District Inspectors (DIs)

Other programmes

Because Bangladesh is an agricultural country, agriculture has been given its proper place in the school curriculum. The Directorate of Public Instruction in collaboration with UNICEF has been running a programme entitled 'Primary School Agriculture Programme'. The objectives of the programme are (1) to implement the practical agriculture aspects of the General Science Syllabus for classes IV and V, (2) to improve classroom teaching in agriculture and nutrition within the framework of the General Science Syllabus, and (3) to disseminate knowledge of agricultural practices and nutrition to the homes through the students. Under this programme one teacher from each school has a two-week intensive training at the PTIs.

Inasmuch as population explosion has been identified as the biggest problem in Bangladesh, population education has been integrated with the syllabi of different school subjects. Since population education is a new subject area, the Ministry of Education felt the need to set up a crash programme to orient and train teachers in this area. The newly established Office of Population Education Programme which has regional offices at the district level launched an orientation and training programme for 39,000 primary school teachers, 8,000 headmasters of secondary schools, 600 college teachers, 700 heads of vocational and technical institutes and colleges, 420 Thana Education Officers and 245 key personnel during the past two years and is envisioned to continue. The training and orientation of the primary school teachers is organized at the Thana level. The courses are of 10-day duration and the resource persons for these courses include the Thana Education Officers, heads of secondary schools, and the population education administrators.

As proposed by an ad hoc National Curriculum and Syllabus Committee created in 1975, the government introduced a new curriculum and syllabus, in classes I and III in 1978, and classes IV and V in 1979. The introduction of the new curriculum and syllabus, however, gave rise to various problems regarding their implementation. To overcome this difficulty, a crash orientation programme for primary school teachers was proposed. It was designed to involve all the primary school teachers and the primary school supervisors and inspectors. Initially 202 key teacher training from PTIs, BEERI and AFE received intensive orientation on the new curriculum and syllabus through centrally organized workshops held at BEERI, Dacca. In the second phase of the programme, 36,700 primary school head teachers received a 10-day orientation in workshops simultaneously held at the 47 PTIs in June and July this year. At the third phase of the programme, 555 field level supervisors will receive an orientation at the AFE, while in the fourth phase, an orientation for all the primary teachers will takes place at each

individual school. It will be conducted by the head teachers of the school. This activity will be closely monitored and evaluated by the supervisors who received an orientation during the third phase.

Plan for a continuous in-service training for primary school teachers

Within the framework of the plan for achieving universal primary education in 1980, a project has been undertaken with the assistance of IDA for 40 selected Thanas of Bangladesh which comprise about one fourth of the country's area. Under this project, elaborate schemes for training the project personnel including the teachers on a continuous basis have been drawn up. It has been planned that these persons will be divided into different groups and trained in the following manner:

1. Training of Group A, a heterogeneous group of 36 key trainers and 34 other key project personnel selected from the area of teacher training, administration and research, will be about four months in duration and will be conducted overseas and in-country. The group will be subdivided into smaller groups and receive training in a staggered sequence.

2. Group B will consist of another heterogeneous group of 220 persons from the Project Implementation Unit, Research and Planning Unit, Academy for Fundamental Education, PTIs and the TEOs. They will be trained for three months at the national level by the Group A people who will be supported by local and expatriate experts as resource persons. For training purposes the group will be subdivided into subgroups in order to provide for the special needs of the teachers and educators, respectively.

3. Group C will consist of field workers, supervisory staff, newly recruited Thana Education Officers, headmasters and teachers - totalling about 16,830 persons. The field workers will be trained on a recurrent basis throughout the project period (1980-1985) at regional centres by Group A and Group B personnel. In the first year, newly recruited assistant teachers will receive an initial basic training of 60 days at the PTIs. Thereafter, all teachers will receive regular in-service training in about six sessions each year. These sessions will be organized by the Assistant Thana Education Officers for 15-30 teachers at a convenient centre with the assistance of the PTI instructors.

Evaluation of in-service primary teacher education

It has been observed that the methods used for the evaluation of in-service primary teacher education in the country are mostly conventional such as pre-tests, post-tests, questionnaires, on-the-spot interviews, informal discussions, verbal statements, etc. The methods used differ according to the types of the programmes. The reports of the supervisory staff also serve as evaluation tools. However, it is noted that there have been no serious attempts to evaluate the programmes.

Suggestions for improvement of in-service primary teacher education

The following suggestions are offered for the improvement of in-service primary teacher education:

1. In-service education of primary school teachers should be pursued on a continuing basis, and training of the trainers and supervisors should form part of the in-service education programmes for school teachers.
2. The resources and training capabilities of the different institutions and agencies should be strengthened and mobilized; appropriate linkages should also be established among them.
3. Self-learning materials, modules, recorded tapes etc., should be developed and used.
4. Vacation courses, correspondence courses, programmes for distance teaching through radio and television should be developed.
5. Proper evaluation, follow-up, and feedback mechanisms should be developed.
6. Research should be carried out to determine the required quality and quantity of in-service education and training of primary school teachers with maximum teacher involvement at the planning stage.

INDIA

Primary education in India includes the first seven or eight years of schooling comprising two stages: first stage of four or five years called primary stage, and the second stage of two to four years called middle stage. A giant force of 2,344,100 teachers man these two stages: 1,599,182 teachers at the first stage and 744,918 teachers at the second stage. (Figures are according to the Fourth All India Survey.) Of this number,

approximately 219,497 (13.73 per cent) of the first stage and 99,290 (13.33 per cent) of the second stage are still untrained; 9,375 teachers of the first stage have not passed even VIII standard, and another 419,683 teachers have just passed seven or eight years of schooling. Similarly, 889 teachers of the second stage have not even successfully completed seven or eight years of schooling. Another 52,705 teachers of this stage have successfully completed only eight years of schooling.

For those teachers who could not get professional pre-service training or who do not possess the required minimum academic qualification (228,872 at the primary stage and 100,179 at middle stage), in-service training is a must. But even for those 419,683 teachers at the primary stage and 52,105 at the middle stage who have only the requisite qualifications, there is a need for in-service training if they have to keep abreast with the latest developments. This is a gigantic task to be achieved.

Regular in-service training should, therefore, be arranged for the following:

1. Teachers who do not possess the prescribed minimum professional qualification;
2. Qualified teachers who need to improve their professional competence. This could be for a specific purpose in one discipline or it could be for general improvement in different subjects;
3. Supervisors, inspectors, and other administrators associated with primary education;
4. Teacher educators who would conduct in-service or pre-service training programmes for primary school teachers.

The Government of India, the State Governments, local bodies, and various voluntary organizations have been putting in efforts to provide-in-service education. The various agencies involve in conducting in-service training programmes are listed below:

1. National Council of Educational Research and Training (NCERT)
2. State Council of Educational Research and Training (SCERT), State Institute of Education (SIE), and State Institute of Science Education (SISE)
3. Directorates of Education/Public Instruction where there are no SCERTs, SIEs, and SISEs
4. Teacher training institutes at the elementary level

5. Regional institutes of education/district institutes of education
6. Local bodies (corporations, municipal committees, etc.)
7. All India Radio and Television Services
8. Teachers' associations and other voluntary organizations

In the field of in-service education for administrators and planners, the National Institute of Educational Planning and Administration is organizing different types of courses.

A brief description of what these agencies are doing in the field of in-service primary teacher education, either directly by orienting the primary school teachers in new fields of educational activities or indirectly through orientation programmes for teacher educators and also through production of suitable materials for in-service education, is given here.

NCERT, through its various departments of the National Institute of Education and the regional colleges of education, helps teacher educators of teacher training institutions and also the primary school teachers.

National Council of Educational Research and Training

1. A new programme for teacher educators of teacher training institutions (elementary level) has been developed so that they could have better insights into the problems of teacher education at the primary level. It is a long-term course and its impact will be felt only after a few years.
2. NCERT is helping SCERTs, SIEs, and SISEs in developing their programmes for in-service education of primary teachers and teacher educators. This is done by initiating new programmes in the meetings of heads of these organizations, by helping them discuss and understand the implications, and by getting feedback from them in the subsequent meetings.
3. The Science Education Programme (SEP) is a co-operative undertaking involving the government of India, UNICEF, and Unesco. The programme is intended for primary and middle levels, i.e., the first seven or eight years of schooling.

The new curriculum and instructional materials produced by

NCERT were given to the States as models for their consideration, adoption/adaptation, translation and printing, etc.

In-service education programmes for primary school teachers were conducted in the different States through SIEs and SISEs. NCERT organized leadership training courses in which key resource persons from the States were given orientation. It was also felt that in-service education is needed for other workers, too. Thus, NCERT developed books on organization and training programmes for method masters, teachers of training colleges, inspecting officers, lab assistants, and workshop instructors, and distributed these to the States for their use.

A special training of primary school teachers in Science Education was conducted through television (Satellite Instruction Television Experiment). This programme was carried out in six States in India for one year through multi-media project. The innovative features of this programme is the involvement of primary teachers in curriculum development, and decentralization of the whole approach resulting in appropriate use of local environment and resources.

4. NCERT has been working on two UNICEF-assisted projects viz. "Primary Education Curriculum Renewal" (Project 2) and "Developmental Activities in Community Education and Participation" (Project 3). In the pilot phase the projects were undertaken in 30 schools and three community centres in 15 States/Union Territories. Since primary school teachers are involved in these projects, they are also given in-service orientation. An outcome of the efforts of Project 2 is the development of minimum learning continuum for the primary stage of education.

5. Another major project which is underway is Comprehensive Access to Primary Education. This project is meant to help disadvantaged children. It involves training programmes at different levels and implies in-service education for teacher educators and teachers later. If the primary school learning centres have to function effectively, the teachers must learn how to use self-learning modules.

6. Another programme of in-service education has been conducted wherein teacher monitors responsible for training teachers in their respective States were trained by the Centre for Educational Technology of Education and Culture. It was a

face-to-face training programme for key persons.

7. A new programme of continuing education centres has been initiated wherein the participants are secondary school teachers and teacher educators of teacher training institutions at the primary level. These centres will be located in existing educational institutions and will draw upon the institutions' resources in terms of part-time teaching staff, laboratory space, library, and other facilities. It is a joint venture of NCERT and the States.

8. In-service programmes in evaluation are conducted for key persons in the States. Programmes for primary teachers like Development of Diagnostic Tests in Language and Mathematics, and Criterion-reference Tests in Science and Social Studies have been conducted.

Agencies like All India Radio and Television are helping in broadcasting programmes specifically meant for teachers of this stage. More effort should be exerted so that these programmes could be utilized better and by a larger number of teachers.

Programmes under state organizations

State institutes of education were set up in 1963 with the express purpose of improving school education (particularly at the primary level), teacher education and inspection. Some of the programmes being carried out in different States are listed here:

1. SCERT Orissa has launched a big programme of in-service education of primary school teachers. It is designed to give all teachers a 10-day programme. It involves about 600 sub-inspectors of schools and 600 teachers from senior schools who will work as resource persons. Clusters of 10 schools each will work as a school complex.

2. In Karnataka, where there are 82 teacher training institutions at the primary level, 35,000 primary schools, 200,000 primary teachers, and 18 regular centres help train about 30,000 teachers a year. In each centre there is a group of resource persons for all subjects. Self-learning units have been prepared for learning languages.

3. SIE Chandigarh is working on an experiment in a non-graded system of education for primary education.

4. In Maharashtra, there are six regional in-service training centres where every year 27,000 teachers of upper primary classes are given training for 28 days.

5. In Kerala, those responsible for in-service primary teacher education believe that it is not possible to have face-to-face programmes which can train all the teachers. Thus, they have been using a Radio-cum-Correspondence Course for the last five years.

6. Jammu and Kashmir have started district institutes of education which conduct in-service education programmes.

7. Uttar Pradesh has started a massive programme of in-service training of pirmary school teachers. Twenty-two pre-service training centres for primary school teachers (normal schools) have been converted into in-service training centres. The programme was launched in 1974-75. A batch of 100 teachers are deputed every month for a four-week in-service training programme. Resource persons of these centres are given orientation courses at the State Institute of Education. About 50,000 teachers have benefited from this project. It is proposed that in-service training in all the districts be initiated in 1980 to cover all the teachers of Uttar Pradesh.

8. Andhra Pradesh has 98,136 teachers at the primary level and 35,072 at the upper primary level. Since most of the teachers are fully qualified to hold teachers' posts, in-service education programmes are aimed at enriching their knowledge of subject matter and improving their professional competencies.

Apart from SCERT, colleges of education and teacher training institutes of the English language teaching campaign centres also organize in-service education programmes.

It can be concluded that in-service education in India is undertaken by all the agencies responsible for it. What is needed is proper pacing of the programmes. Secondly, face-to-face programmes may not be feasible if all teachers are to be trained. Programmes like those undertaken in Kerala may be tried in other States after evaluating their effectiveness. What is important is the involvement of the inspectors of education in this massive programmes as educator-evaluators.

INDONESIA

Introduction

There are around 110,000 public and private primary schools in Indonesia, including the schools run by the Ministry of Religious Affairs. These schools are staffed by almost 600,000 teachers.

Pre-service training programmes for pre-school and primary school teachers are conducted by teacher training schools for primary education called Sekolah Pendidikan Guru (SPG) which are secondary schools under the management of the Directorate of Teacher Education in the Directorate General of Primary and Secondary Education of the Ministry of Education and Culture. The training consists of three years schooling after lower-secondary education. The quality of the teachers produced by the various SPGs differs.

In-service training programmes for primary teachers are necessary for the following reasons:

1. Pre-service programmes are irrelevant to the school programmes;
2. Educational reform, started in 1972, has caused many curricular and other changes and activities such as:
   a) experimentations in pilot schools of eight teacher training institutes called Institut Keguruan dan Ilmu Pendidikan (IKIP) in search of a more efficient, effective, and flexible system that is more relevant to national development programmes;
   b) standardization and improvement of primary school curricula adopted in 1975; and
   c) introduction of educational innovation and strategy.
3. Re-training is needed to improve the competence of underqualified as well as qualified teachers.

Responsive to these needs, the in-service training programmes for primary teachers have the following main objectives:

1. To improve upon the pre-service training at the SPGs;
2. To keep abreast of changes in terms of the teach ing-learning process and methodology in the implementation of the 1975 primary curriculum; and

3. To re-train underqualified teachers.

The area of in-service programmes consists of:

1. Educational reform in general;
2. Curriculum improvement, including the formulation of objectives, teaching-learning strategy, delivery system, evaluation system, guidance programmes, and classroom and school administration;
3. The role of innovation and technology, particularly the radio broadcasting delivery system; and
4. Subject matter content in five major areas (Mathematics, Science, Social Studies, Pancasila Moral Education, Indonesian Language).

In-service training programmes for primary teachers

In-service training for primary teachers was intensively conducted in 1973 with the project on the Development of Primary Education or Proyek Pembinaan Pendidikan Dasar (P3D) which was designed to improve the quality of primary education. The P3D programmes provided in-service training for approximately 500,000 elementary school teachers and printed and distributed nationwide textbooks and teaching-learning aids for science, social studies, mathematics, and the Indonesian language.

Various problems encountered in the conduct of the in-service training programmes have led to the following features of the programmes:

1. Development of in-service programmes at the central and provincial levels;
2. Training of mobile training teams called TPKs* at the central level; and
3. Training of primary teachers by the TPKs.

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* Tim Penatar Keliling

In-service primary teacher education

Communication and transportation problems have given rise to different categories of training schemes at the regional level as follows:

1. In 17 provinces with adequate communication and transportation systems, TPKs at the regency level conduct training programmes of 4-day duration at elementary school centres called Sekolah Dasar (SD centres) in sub-districts three times a year, with four-month intervals.
2. In 10 remote provinces with poor communication and transportation systems, TPKs at the provincial level conduct annual training programmes of 12-day duration at one of the primary schools in the regency.

The in-service training programmes are conducted annually for continuity in accordance with the National Five-Year Development Plans (PELITA).** The third PELITA provides for the in-service training of primary teachers under the Primary Education Improvement Project (P2SD)*** which aims to follow-up and continue the P3D project.

In 1976, the Communication Technology for Primary Education Project or Teknologi Komunikasi Pendidikan Dasar (TKPD) was established by the Ministry of Education and Culture. It covers eleven provinces, including 2 provinces in which the project was pilot-run. The TKPD activities include:

1. Production annually of package radio programmes for broadcast through government or private radio broadcasting agencies within the target areas;
2. Conduct of training courses for its staff at national and regional levels, mainly on scriptwriting, production, media utilization, etc.; and
3. Provision of radio receivers and slide programmes to the regional centres and certain schools.

The Ministry of Education and Culture in cooperation with the Ministry of Information conducts this project. The Ministry of Education and Culture, through the Centre for Communication Technology for Education and Culture, is responsible for the planning, software production, and implementation of the in-service training for primary school teachers. In the eleven provinces concerned, a

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** Pembangunanlima Tahun

*** Proyek Pembinaan Sekolah Dasar

sub-unit of the Centre is established as an implementing and monitoring unit.

The Ministry of Information helps in broadcasting the programmes. Each radio programme is broadcast for about 20 minutes twice daily from Monday through Saturday throughout the whole academic year.

The approximate number of primary school teachers who have availed of the programmes in the last years are as follows:

1977	5,000
1978	65,999
1979	80,000
1980-1981	100,000

Learning materials are also produced and distributed with the radio programmes. The programmes are monitored and evaluated as part of a feedback system to continuously improve the quality of the educational broadcasting system.

Methodology for evaluation of the in-service programmes

Evaluation is a built-in feature of the in-service programmes. Evaluation is conducted annually, utilizing a data collection method based on questionnaires, inventory and observation. Respondents are determined through random sampling techniques.

Specifically, the 1977 evaluation of the P3D project proceeded according to the following scheme:

1. Questionnaires were distributed to teachers, headmasters, and school supervisors in nine provinces.
2. The respondents included teachers (mathematics, science, Indonesian language, and social studies), headmasters, and school supervisors.

It was concluded that the in-service programmes were considered "good" because the trainees gained improvement in knowledge and skills related to their daily activities in the field.

Improvement of in-service programmes

The following suggestions are presented for the improvement of the training programmes:

1. Improvement of the present system in terms of programmes to be conducted, the delivery system, teaching of training techniques and teaching aids.

2. Improvement of the radio broadcasting network and the extension of this programme throughout the rest of the provinces.

3. Introduction of the modular system of learning. Fortunately, this system has been intensively tried out in pilot schools, both primary and secondary, at eight IKIPs since 1974. Furthermore, the modular instruction system has been tried out with first year students at IKIPs and a number of universities.

4. Introduction of qualitative improvement through professional support for teachers by school supervisors and headmasters:

Research and development studies on in-service programmes

The in-service training of primary teachers is viewed as integral part of other on-going research and development activities such as:

1. The development, production and distribution of textbooks for teachers as well as students of mathematics, science, social studies, Indonesian language and Pancasila moral education;

2. The development of teaching aids to facilitate the teaching-learning process. One such activity is the Curriculum Development Centre's development of science kits for primary education which took three years to develop and tryout.

One of the more significant studies in the process of development is concerned mainly with the quality improvement of elementary education through professional support for teachers. Entitled "Qualitative Improvement Through Professional Support for Teachers in Primary Schools," and frequently referred to as the Supervision Project, it is visualized as an in-service teacher training programme. It aims to improve elementary education by improving the quality of support given to elementary teachers in their classrooms.

The project was started in November 1979 in a pilot-run in Cianjur Kabupaten in West Java. It has five overlapping phases envisioned to culminate in national dissemination in June 1984 onwards. A complex and ambitious project with Indonesian government and British Council funding, it seeks to overcome the deficiencies

of the Indonesian elementary school system and of the current in-service primary teacher training programmes.

The project will provide the following:

1. Training as well as training materials for supervisors and headmasters in the provision of professional and administrative supervision of teachers.
2. Establishment of teachers centres with teachers rooms in one elementary school in every Kecamatan or country subdivision, and at one SPG in every Kabupaten or country. These centres will offer formal in-service training for teachers on locally chosen topics and will be developed as models of desirable elementary school teaching/learning procedures with the participation of grassroots staff.
3. Limited specialization under the policy of "subject matter specialist" teachers.

MALAYSIA

Introduction

The recent report of a committee appointed by the Malaysian Cabinet to study the implementation of the National Education Policy expressed, among other things, concern about the quality of primary education in the country. Among many recommendations for the improvement of the quality of primary education, the committee gave full endorsement to the Ministry of Education's efforts to uplift the professional competence of teachers at this level through both pre-service and in-service education programmes.

Within the concept of continuing education for teachers, in-service teacher education has the overall aim of assisting the teacher to keep abreast of developments in knowledge, methods and techniques in classroom instruction as well as in his various roles as a teacher. In line with this aim, the main objectives of the in-service teacher education programmes in Malaysia are:

1. To provide initial teacher training for untrained temporary teachers of general subjects and of Islamic Studies in order to qualify them for permanent employment;
2. To update the academic and professional knowledge of teachers and to widen their experience in various subject disciplines;

3. To orientate teachers towards new developments in teaching methods, techniques and curricular programmes.

Policy, planning and organization

The various professional divisions of the Ministry of Education are jointly and severally responsible for the conduct of in-service teacher education. The identification of needs, objectives and content for specific programmes by these divisions is done through systematic surveys and questionnaires as well as informal feedback from the field. Course designs based on these felt needs are then referred to decision-making bodies such as the Central Curriculum Committee and, if necessary, the Education Planning Committee for approval. The implementation of approved programmes is coordinated by the In-service Education Coordination Committee of which the Teacher Training Division is the secretariat. This committee is also responsible for the allocation of funds within the total sum approved by the Federal Treasury.

Current in-service education programmes

The in-service education programmes organized and conducted currently can be classified under three main types:

1. Three-year basic teacher training courses held during school vacations for untrained temporary general purpose teachers and Islamic Religious teachers. The courses for general purpose teachers are being phased out and will cease to operate after 1981.
2. Full-time supplementary courses in various subject areas for selected trained teachers. These courses are conducted in teacher training colleges for a duration of three months, six months, or one year.
3. Short courses, seminars and workshops conducted by the various professional divisons of the Ministry at national, state and district levels.

The strategies and techniques used in the implementation of these courses include:

1. A multi-tier strategy. Training courses at the national level for key personnel who, in turn, conduct courses at state and district levels for teachers;
2. Workshops which are combined with courses or

seminars. These workshops are aimed at assisting the participants to exchange ideas and experiences, identify learning difficulties, and develop instructional materials;

3. Distance learning which involves the production of multi-media self-instructional materials for the use of teachers in the field;

4. A mobile in-service education unit which conducts courses and workshops during weekends at the local level for teachers of agricultural science. (This project was reported in detail in the Study Group Meeting on "In-service Teacher Education: Developing Innovative Strategies and Instructional Materials", held in Bangkok in 1979).

Evaluation

The evaluation of an in-service education programme can be conducted formally and/or informally at one or more of four main stages:

1. Before the programme is conducted;
2. At the beginning, during and immediately after the programme is conducted;
3. At regular intervals during a long-term programme;
4. Some time after the conclusion of the programme.

In Malaysia, lecturers and other in-service staff use a variety of techniques to evaluate short courses. These include questionnaires administered to course organizers, participants and neutral observers; supervision and monitoring by officers at national and state levels; and a system of feedback by inspectors of schools.

The number and variety of in-service education programmes implemented in Malaysia have made it impracticable to undertake a systematic, comprehensive evaluation of all programmes within the resources currently available. However, case studies of evaluation at the various stages of implementation of selected programmes are undertaken to provide guidance for future planning. One example of such an exercise is the evaluation of the In-service Course for the New Form III History Syllabus which is now being completed. An evaluation was conducted of the planning stage, the key personnel course, the courses at the state level, and the effects in the classroom. The findings of this exercise are currently being analysed.

In-service primary teacher education

Trends, problems and future developments

There is an increasing awareness among all personnel and agencies concerned of the importance of in-service education as an effective strategy for qualitative improvement. Such an awareness has resulted in greater systematic planning of in-service education. There is now more coordination between the pre-service and in-service programmes of teacher education so as to avoid duplication of effort and to ensure that there are no gaps in the provision of training for teachers. The Ministry's plan to reactivate and restructure the In-service Education Coordination Committee would increase its capability for planning, coordination and implementation of in-service education.

Greater attention has been focused on the quality of programmes. A nationwide survey is being carried out to determine the current status of implementation of in-service education programmes to provide data for improvement.

The existing infrastructure for in-service education is being critically studied in order to improve the quality of programmes. For many years, the Key Personnel (KP) system has been used for short courses, i.e., selected teachers are given special training and exposure to curriculum changes or other matters at national level and they, in turn, conduct similar sessions for other teachers at the state level. The system, however, is not really satisfactory because the KPs are all full-time teachers and, therefore, cannot carry out their tasks fully and effectively. This has resulted in the proposal that the KPs be given appointments as full-time personnel so that they can concentrate totally on the tasks pertaining to in-service education and matters related to activities in the classroom.

The concern for quality has led to the development of alternative strategies in in-service education. The Population Education Project in Malaysia has selected a "self-learning material" (SLEM) strategy as a way of reaching the large number of teachers concerned in the shortest time possible and with the least possible dilution. Every participant in the project is given a set of eight SLEM modules. Each module discusses a specific topic. To provide for future clarification and reinforcement of what teachers learn from the modules, discussions are held at the school level with the head teacher leading the discussion. The latter has a special management module to assist him in performing his task. This strategy has been tried out in two areas involving a total of 49 schools and 550 teachers, including head teachers. The report on the tryout is being prepared and there are indications that the strategy is feasible and effective.

Another strategy using multi-media self-learning materials is the basis for a programme which aims to widen the knowledge and upgrade the skills of primary school teachers in science and mathematics. This strategy is modelled on that used in the "Special Project for the Improvement of Science and Mathematics Teaching in Primary Schools" which was started in 1970 especially for the benefit of schools in rural areas. Under this earlier project, teachers' guides were developed to accompany the existing science and mathematics syllabus. In-service training of teachers was carried out through the respective state centres which employed key personnel to train/expose other teachers on the inquiry approach, the use of teachers' guides and the improvisation of teaching aids. Multi-media modules consisting of the printed text, apparatus learning kits, slides, sound tapes, three-dimensional models, and a teachers' manual were used by the area supervisors both for self-learning and to instruct other teachers. The "Special Project" also used a mobile van equipped with a laboratory as well as materials to service the needs of outlying rural schools.

Another promising trend is the establishment of Educational Resource Centres (ERC) in the various states. This would lead to greater decentralization, permitting state authorities to develop programmes and activities more suited to their clientele and environment as well as to improve supervision and monitoring of programmes.

The establishment of the Ministry of Education Staff Training Institute (MESTI) is another step in developing the existing infrastructure. One of the Institute's functions when it is fully operational would be to provide research and consultancy services for all the divisions of the Ministry involved in in-service education.

NEPAL

Introduction

If educational development of Nepal is evaluated in quantitative terms, primary education will undoubtedly stand out as a highly successful area. The actual enrolment in primary schools has exceeded the targets of the national development plan. Today Nepal claims to have enrolled 87 per cent of the primary school-age population as against the original target of 64 per cent.

The numerical expansion of primary education has had several adverse effects on the primary teacher education programmes. First, the relaxation of regular qualifications for primary teachers has created a large group of teachers who are underqualified

for primary school teaching as shown in Table 1. His Majesty's government has fixed S.L.C. (Secondary School Learning Certificates) as a required academic qualification. However, because of the shortage of qualified teachers, eighth-grade qualification has been provisionally accepted as an alternative requirement.

Table 1. Number of trained primary school teachers

Year	No. of Teachers	Trained Teachers	Untrained Teachers	Percentage of Trained Teachers
1975	18,874	8,063	10,811	43%
1976	20,775	8,142	12,633	39%
1977	23,395	8,794	14,601	38%
1978	23,969	8,948	15,021	27%

Another major problem due to the expansion of primary education in remote areas has been the shortage of even the eighth-grade candidates for teaching positions.

Democratization of primary education poses another problem. This is the low enrolment ratio of girls in primary schools as compared to that of boys.

The factors stated earlier illustrate the magnitude of the problem of primary teachers training. The Institute of Education has devised several structures of training to solve this problem.

Existing structures of primary teachers' training programmes

The following are the existing structures of training programmes for primary teachers:

1. "B" level primary teacher training programme - This is a 10-month training course for in-service teachers who don't possess the S.L.C. Certificate.
2. "A" level primary teacher training programme - The courses of first year of campus or first and second semesters of Certificate Level in the Institute of Education Campus (General) are designed to produce trained primary school teachers.
3. High school primary teacher training - High school students who graduate from vocational

high schools with 'Education' as vocational subjects are regarded as qualified teachers.

4. On-the-spot primary teachers' training programme - This is a programme which has three main features:

   a) Mobility of the training centre

   b) Teachers remain full-time teachers while receiving training in the morning/evening

   c) Actual regular classroom teaching of the trainees as supervised by 10E teachers and given credit for practice-teaching

5. Remote area primary teacher training - This is a programme in which in-service teachers, irrespective of their academic qualifications are admitted for training for a maximum period of four years.

6. Equal access for girls and women to education - This is a primary teacher training programme launched on the assumption that the presence of lady teachers would motivate parents, who otherwise would not send their daughters to school, to do so.

7. Primary teacher training through distance learning - The following are the special features of this structure of training:

   a) The Institute of Education prepared self-instructional materials covering all the areas of primary teacher training.

   b) The Institute of Education organized a 15-day orientation programme in the district headquarters for 40-50 teachers.

   c) A month's contact-session is organized after about five months of self-study.

8. Radio education teacher training programme - The following are the main features of this programme:

   a) This programme is designed for those primary teachers who have not passed the S.L.C. Examination.

   b) The teachers enrolled in this programme are provided with packages of self-instructional materials.

c) The teachers are provided with radio receivers to enable them to listen to the radio-broadcast on each lesson of the course.

d) A contact-session of about a fortnight duration is organized for all teachers.

Presently, the Institute of Education operates the two types of training for S.L.C. as well as Non-S.L.C. students on a massive scale. However, since these two types of training have been developed for two different types of clientele, their training curricula differ both in content and in method.

Continuing education after 1971

After the introduction of the National Education System Plan (1971-76), the then College of Education along with the primary school teachers' training centres and the National Vocational Training Centre were converted into the Institute of Education under Tribhuvan University. The IOE adopted more formal means for the continuing education of teacher educators. The continuing teacher education activities since 1971 are briefly described under the following headings:

1. One year in-service education programme - Teacher educators who were B.Ed. degree holders and who had been working in teacher education for several years, and those who had mastereral degrees in other areas were given the opportunity to upgrade themselves through this programme.

2. Organizing workshop - The IOE also organized several workshops for teacher educators. Such workshops on unit planning and curriculum framing were conducted by the IOE during the winter vacation in 1975. Almost all the teacher educators in Nepal participated in that workshop. The IOE also initiated one such workshop on formulating unit objectives and evaluation techniques for the teachers of other institutes.

3. Instructional supervision system - The IOE also introduced the instructional supervision system with a view to improve classroom instruction in the different teacher education campuses. Under this system, subject-area supervisors would visit different campuses every semester and observe classroom instruction. All the above-mentioned programmes contributed much in providing continuing education for teacher educators.

Major programmes of in-service education of primary teacher educators

The Institute of Education has felt the urgency of providing in-service training for primary teacher educators to improve the quality of primary teacher training. The following are the major programmes developed along this line:

1. The IOE deputes five to 10 underqualified teacher educators for M.Ed. courses every year.
2. The IOE has organized the National Advanced-Level Workshop on Teacher Education with the assistance of Unesco, Bangkok.

Methodology of evaluation of primary teacher education

The following methodologies are expected to be used to evaluate the in-service primary teacher education in the coming years:

1. The primary teacher education workshops would develop a competency-based programme with modular programmes.
2. The instructional and training programme would be so designed as to enable the teacher educators to use the sequence of training programme developed in the workshops.
3. A study design would be prepared to measure the extent of use of the method by the trained teachers of that particular group.
4. The findings of this evaluative study would serve as feedback for future in-service training of primary teacher educators.

Suggestions for improvement

Numerous variables influence the effective operation of the primary teachers' training programme. The major ones are as follows:

1. Quality of the teacher trainee
2. Methodologies and delivery systems used for the training
3. Quality of the trainers (primary teacher educators)
4. Availability and utilization of appropriate

physical facilities

5. Training curriculum

The traditional campus-based training programme has several inherent weaknesses. The textbook-based training programme with tail-end examination system has failed to develop positive attitudes towards teaching which is crucial in preparing a good teacher. The use of technology may be helpful in making the training more effective and economical. Programmed learning materials can also be very useful to teachers who can utilize these materials as soon as they enter the field of teaching.

The task of primary teacher training can only be done by highly qualified teacher educators. Yearly programmes like workshops, seminars or even short-term training should be organized for the primary teacher educators for continuous upgrading of their professional standing.

The primary teacher educators need to be made aware of the value of using locally available low-cost materials. Workshop seminars should be organized for this purpose.

Another important determining factor is the training curriculum. The traditional training curriculum is a mixture of some pedagogical courses, practice teaching and the regular content courses. The primary teacher education training institution should practice what it preaches. Primary teacher educators should set the example of good teaching in the training programmes.

Need for research development studies for primary teacher education

Much of what is included in primary teachers training programmes is a body of pedagogy which includes:

1. Child development
2. Learning theories
3. Methods of teaching different subjects.

All these components of the pedagogical courses are, however, based on foreign books and research studies done in foreign countries. Research studies on native children based on national norms should be conducted in order that the knowledge-base of the courses on pedagogy will be enriched.

Children's learning is also substantially influenced by the ethnic group in general, and the socio-economic conditions of the

family in particular. Investigations designed to determine the effects of such influences would also improve the pedagogical content of the training programmes.

Another important area which should be studied is the structure of primary schools. Nepal's topography necessitates the establishment of small primary schools all over the country. A research programme which will identify the most appropriate structure of primary education would be very useful for the effective operation of this level of education.

PAPUA NEW GUINEA

Introduction

In-service training of teachers in Papua New Guinea is viewed by the Ministry of Education as an integral part of the teaching profession. It is an on-going activity which covers teachers at all levels. However, proportionately more field officers are selected for in-service training than those working in the divisions. These training opportunities are advertised every year in the April issue of Education Gazette.

The Ministry of Education is currently faced with the problem of meeting the needs of two groups of primary teachers. The two groups are:

1. Teachers who have only Grade 8 qualification with one-year teacher training, and
2. Teachers with Grade 10 or higher qualification with two-year teacher training.

In-service training of teachers with Grade 8 qualifications and one-year training

These teachers are underqualified and poorly trained. However, they constitute approximately 30 per cent of about 13,000 teachers in primary schools.

Realizing the need to upgrade the academic qualifications and improve the professional knowledge of primary teachers, the Ministry of Education decided to have the following programmes:

1. Grade 9 vacation programme (eight-week credit course run during Christmas)
2. Grade 9 and further training (one-year course at the In-service College)

3. Further training type I (six-month course at the In-service College). This is aimed at enhancing the professional skills and knowledge of primary teachers with the hope that they become better teachers. The course participants are selected by the provincial in-service committees using a very elaborate selection system. The successful applicants undergo six to 12-month in-service training at the Teachers In-service College studying primary school subjects and new methods of teaching.

4. Grade 9 correspondence programme (a course conducted by the College of External Studies)

5. In-service credit scheme - This is a scheme which gives credit points for teacher training, teaching experience and Grade 9 subjects completed by correspondence. When a requisite total of credits is accumulated a teacher gets Grade 9 equivalent and becomes eligible for further promotion.

In-service training of teachers with Grade 10 or higher qualifications

The second group of primary teachers are those who have Grade 10 or higher qualifications with two-year teacher training. These teachers should serve for at least two years before they become eligible for any in-service course. A number of in-service programmes ranging from three-month to two-year duration are available for them. These could be either in Papua New Guinea or abroad, and are mostly professional programmes aimed at enhancing the professional and administrative skills of the participants.

Each province has an in-service committee which selects teachers for various in-service courses. A senior primary inspector, a curriculum adviser, a Papua New Guinea Teachers Association representative, and a mission education representative constitute this committee. It selects teachers for in-service training and also plans, organizes and conducts short-term in-service courses in the province.

Other in-service training programmes

In-service training opportunities are not many and, therefore, the selection of participants is highly competitive. Although many teachers apply each year, only a few are selected. The needs of those who are not selected are attended to by the provincial in-service programmes and the school in-service pro-

grammes conducted by the school inspectors, curriculum advisers, curriculum unit officers, and headmasters of primary schools.

Each year all teachers in Papua New Guinea participate in a compulsory one week in-service training programme conducted by provincial in-service committees on a theme decided by the National Education Board. This is the National In-service Training Week. The Department of Education provides partial financial assistance to these programmes; the teachers bear 75 per cent of the training costs.

All the primary schools conduct regular in-service training in the form of classroom visits, workshops, and school visits followed by discussion of teaching methods, school administration, curriculum, assessment, etc. This is done either by a group of schools working together or a school working on its own.

Evaluation

Although these in-service training programmes have been going on for quite sometime, no nationwide evaluation of these programmes has been undertaken, although summative evaluation is always carried out at the end of some programmes. Two types of evaluation are done, viz., student evaluation and coordinator evaluation. These evaluation reports contain important recommendations for improvement of the courses/programmes. There is, therefore, an immediate need to carry out detailed research to determine the effectiveness of the various programmes.

Problems

1. Teachers who have undergone in-service training fail to implement the new ideas, skills and knowledge.
2. Many underqualified teachers undergoing in-service training find it difficult to cope with the work required in these programmes.
3. Many women teachers and some men teachers are not interested in these courses.
4. Teachers attending courses do not take their families with them, so family problems affect their training.

Innovative trends and future development

1. All in-service training courses are centralized in the Port Moreby Teachers In-service College

which has an in-take capacity of 500 students. This college has good resource facilities in terms of staff, library, laboratory, and other equipment not available in other places.

2. In-service training through radio-cum-correspondence programmes are under preparation to benefit more teachers.

3. Television is used in a professional skills development course at Port Moresby Teachers In-service College. The 40-week course is designed to improve individual teacher performance in selected classroom teaching skills. It is given to rural school teachers with 10-15 years of service who have relatively low level of competence in teaching and use of English as medium of instruction. The use of television and video-tape as a component of the broad integrated programme has made the programme more effective in four areas:

   a) isolating a teaching skill so that the in-service trainee gets a clear, unambiguous concept of that skill;

   b) demonstrating the application of the skill in a classroom activity;

   c) stimulating interest in practising and improving the skill; and

   d) involving in-service trainees in practising and modelling the skill through video-taped peer teaching activities.

REPUBLIC OF KOREA

Introduction

It is common knowledge that the quality of the teacher determines the quality of what his students actually learn. It is imperative, therefore, that the issue of teacher quality be given careful consideration in any country's educational programme.

Statistics issued by the government of Korea indicate that as of 1976, 48.22 per cent of the total number of primary school teachers were underqualified or did not satisfy the prescribed qualifications of Junior Teachers College level schooling (14 years). This is the result of emergency or crash training programmes introduced to prepare in the shortest time possible new teachers to meet the rapid expansion of the primary school population, as well as improve the quality of teachers and teacher

education. As a consequence, there is a high proportion of underqualified or inadequately trained teachers in primary schools.

Trends in in-service education

In-service education for primary school teachers may be traced back to the periods of the Yi dynasty and the Japanese occupation, although the liberation of Korea from Japanese colonial rule is considered the turning point in education in Korea. Since the repatriation of Japanese nationals in Korea, schools experienced an acute shortage of qualified Korean teachers. Consequently, the Republic of Korea had to hurriedly develop emergency teacher training programmes to meet the urgent need for primary school teachers, while implementing various in-service education programmes.

The Ministry of Education has assumed primary responsibility for the implementation of in-service education programmes with the collaboration of other institutions or agencies. The Ministry's legal basis for assuming the responsibility are Articles 74 and 124 of the Education Law issued by Law No. 86 in 1949. The article read as follows:

> Article 74 (Responsibility of the Teacher): The teacher should always try to develop his personality or character and qualification as the salt of the earth and should devote himself to education and should always try to continue his study and training in the academic field as well as in the principles and methods of education.
>
> Article 124 (Teacher Training Institute): The Ministry of Education, in accordance with the provisions of the Presidential Decree, can establish and approve the establishment of teacher education institutions such as temporary teacher training, seasonal or evening teachers college, teachers college, college of education, graduate school of education, and other necessary in-service education programmes.

In 1979, the Ministry sponsored 22 in-service education programmes for 36,751 primary school teachers across the nation. This figure accounts for about 32 per cent of the total number of primary school teachers - 115,245 as of 1979. The percentage would be higher if the number of teachers who took part in programmes implemented by other non-official agencies are taken into account.

In-service primary teacher education

Many institutions conduct in-service programmes of various types under the direction of the Miniatry of Education. However, the following are important institutions or agencies initiating in-service education programmes for primary school teachers:

1. Institute of In-Service Education for Primary School Teachers - This Institute, attached to the Junior Teachers College, has been responsible for the implementation of in-service education for primary school teachers. The courses conducted by the Institute are as follows:

   a) General course - This is to upgrade the quality of teachers in-service, dealing with the subjects of humanities, current educational theories, teaching methods, and curriculum development.

   b) School administrator course - This is to increase the competencies of school principals and vice-principals, dealing with the subjects of school administration, educational theories, curriculum development, educational research, and education law.

   c) Special course - This course is aimed at assisting teachers to develop specific teaching skills or techniques in specific areas such as music, fine arts, physical education science, Korean language, social studies, and mathematics.

2. Board of Education - There are 11 Boards of Education in nine provinces and two independent cities, which are responsible for education at the local level. Each Board of Education organizes and conducts seminars, workshops, conferences, lectures, and meetings under the direction of the Ministry of Education as part of the in-service education programme. The duration of these programmes vary for different groups of primary school teachers.

3. Education offices at country and city level - There are offices of education at the country and city level under the direction of the provincial Boards of Education. Each office of education which is responsible for the administration of education within a country or city, organizes and conducts various in-service education programmes of different durations for different groups of teachers.

4. The National Institute of Education - The institute has implemented a variety of Saemaul (New Community Development) education for teachers across the nation which emphasizes attitudinal change and which uses meditation techniques to prepare the teacher for his role as a change agent in the community.

5. The Air and Correspondence College - The College, established in 1972, is primarily aimed at young people and adults who missed the opportunity to continue schooling for economic or other reasons. Courses in elementary education are available to those teachers in service who have not completed the Junior College level of schooling. To eradicate the problem of underqualified teachers the Ministry of Education has made it compulsory for teachers who have not finished Junior College level courses to enroll in courses in elementary education.

6. Korean Federation of Education Associations - The association, a voluntary organization of teachers, has committed itself to advancing the course of education and the status of teachers engaged in various professional activities.

Evaluation of in-service education programmes

Research on in-service education programmes for primary school teachers conducted by several agencies and individuals reveals that the programmes have been poorly organized and have failed to solve the problems of teacher effectiveness in the classroom. Some problems revealed by the preliminary study are as follows:

1. There is little integration of pre-service and in-service programmes.

2. Some programmes overlap.

3. The contents of some courses offered in the same institution likewise overlap.

4. Some programmes are inadequate or irrelevant to problems faced by teachers in their classroom activities.

5. Most teachers do not feel encouraged to take part in in-service education programmes because of lack of incentives.

6. Most teachers are compelled to participate in the programmes.
7. Lecture methods have dominated the in-service programmes.
8. Evaluation is seldom carried out; if carried out, it is not taken seriously
9. There has been little coordination between the institution implementing in-service education programmes and the agencies that formulate in-service education policies.

Alternative design for in-service education

To further improve the in-service teacher education programmes, it is necessary to explore new structures and alternative strategies which have proved effective elsewhere. A wide employment of operational research is also advocated as a basis for improving in-service teacher education design.

THAILAND

Introduction

In-service teacher education programmes in Thailand may be divided broadly into two types: (1) those offered to upgrade teacher qualifications, and (2) those aimed at updating teacher effectiveness.

There are two levels of in-service education programmes designed to upgrade teacher qualifications: the certificate level and the degree level. The certificate level is offered mostly at teachers colleges while the degree level is offered both at universities and teachers colleges. In-service programmes to update teacher effectiveness are the responsibility of school administrators and supervisors who organize training workshops, seminars or conferences to help teachers keep abreast with new theories and practices. Usually, teachers colleges are asked to cooperate in organizing these updating activities.

In-service education programmes

In-service teacher education has become a matter of deepest national concern. In-service education programmes being offered at present are as follows:

1. Teacher Council Programmes - The Teacher Council of Thailand offers two types of in-service teacher

education programmes. One type offers short intensive tutorial sessions for teachers who plan to take examinations for certification. The other consists of correspondence studies after which the teachers can take the examinations for certification. There are two levels of examinations for certification: Lower Certificate level and Higher Certificate level. Each level of examination for certification consists of a number of courses. To earn a Lower Certificate, the teacher must pass at least five courses. To earn a Higher Certificate, at least four additional courses must be passed.

It has been found, however, that the Teacher Council programmes have not really met the need for updating teacher qualifications. In 1979, a seminar was held by the Teacher Council to assess the programmes and to seek suggestions for the improvement of these programmes.

2. Full-time training programmes - Teacher training institutions, particularly teachers colleges, have reserved places for teachers who hope to work for a higher certificate or a higher degree as full-time students without loss of salary. There are two ways to join this programme: one is through the yearly entrance examination, the other is through the selection process managed by the school authorities. Only a very limited number of teachers, however, join this programme each year. While the purpose of the programme to upgrade teacher qualifications is fully attained, updating of teacher quality has not been satisfactorily fulfilled.

3. After-hour training programmes - After-hour training programmes, sometimes called "twilight teacher education programmes," refer to the training programmes offered after working hours, usually from 5:00 p.m. to 9:00 p.m., Monday through Friday. A survey of the working effectiveness of teachers trained in the after-hour programme was done by the General Education Department. It was found that the programme hardly helped to improve teacher quality. It was also found that in order to get to their classes in time, a great number of teachers had to leave their schools earlier than scheduled, thus adversely affecting their teacher effectiveness.

4. Open education for certification - Until recently there was only one open university in Thailand, Ramkumhaeng University. Teachers have found this university as another promising means for upgrading their qualifications without leaving their classrooms and without loss of salary. Another open university, Sukothaithammathiraj University, is scheduled to open around the end of 1980.

5. Specific purpose training programmes - Since there have been so many educational innovations, it is necessary that teachers keep abreast with new theories and practices. The school administrators and supervisors organize and conduct training workshops and conferences designed to equip teachers with the latest theories and practices. These are held at the national, regional, provincial, or school level, depending on the scope and content of the training. The following programmes ate worth considering:

   a) In-service education in teaching science and mathematics - This programme was developed by the Institute for the Promotion of the Teaching of Science and Technology. It aims to improve the quality of teaching-learning of science and mathematics.

   b) In-service training for curricular changes - This programme aims to prepare primary teachers to use the new 1978 Elementary Education Curriculum.

6. Community-based in-service training extension centre programme - The teachers colleges, with the cooperation of school authorities, establish extension training centres in the remote rural areas to which primary teachers from the surrounding schools go for training. The training curriculum, issued by the Council of Teacher Education, is reorganized into nine sets of courses. Each set takes about 17 weekends. After the teachers have successfully passed the examination for each set of courses, a number of college credits will be granted and accumulated. After the nine sets of courses have been successfully passed, the teachers are granted a Bachelor's Degree in Education. In this scheme, the teachers do not have to leave their weekly teaching schedule;

thus, they earn college credits toward a Bachelor's Degree without loss of salary. The Teachers College and other teachers colleges in the same region with the cooperation of the university in the region, prepares new training techniques to be used in the programme. Since this programme takes place in actual settings in which real teaching-learning problems can be effectively handled, implementation of new theories and practices derived from the programme can be effectively carried out and followed up.

Improvement of in-service education programmes

Some factors must be taken into consideration in order to come up with more effective in-service teacher education programmes for primary teachers in Thailand. These are as follows:

1. A change in the nation's educational system from 7:3:2 to 6:3:3; that is, six years of elementary education, three years of lower secondary education,and three years of higher secondary education.
2. A reorganization of the elementary education administration system, placing all elementary schools under the Ministry of Education.
3. Implementation of the present National Development Plan as well as the Fifth National Development Plan in 1982 has placed tremendous emphasis upon elementary education as the critical foundation in national development.

Given the above considerations, any alternative to existing in-service teacher education programmes should have at least five essential characteristics:

1. It should satisfy the need to upgrade primary teachers' certification as well as update teacher effectiveness.
2. It should contribute to the development of cooperative living among the people of the community and should help primary teachers increase their capacity to deal with problems both in school and in the community.
3. It should call for better cooperation and maximum mobilization of resources from the teacher training institutions, the school authorities, and the community.

4. It should be community-based rather than campus-based.

5. It should have a valid and reliable evaluation system; both formative and summative evaluation techniques should be implemented in the follow-up process.

Chapter Three

PHILIPPINE STATUS STUDY

Introduction

Rationale

Teachers in the Philippines possess the educational qualifications required for teaching at the primary level. Yet, the results of the Survey of the Outcomes of Elementary Education in 1976 showed that the scholastic performance of grade six pupils was no better than the average achievement of fifth grade pupils. Thus, crash in-service training of teachers for effective teaching was instituted. Considering, however, training cost, staff time, transportation expenses and the non-contiguous island formations of the country, there was a need to design training strategies that would be cost effective and expedient.

Objectives

The survey of the status of in-service education for primary teachers was undertaken to identify growth points and gaps and analyse the processes involved in order to propose alternative designs for in-service education reflecting methods, techniques, evaluation and improvement procedures. The alternative designs may be useful as a guide for school administrators and others who are engaged in the training of teachers. The process used in deriving alternative designs may be replicated in other situations and may be tested as a model for in-service education.

Methodology

In order to gather baseline information needed for design formulation, the following procedure was utilized:

1. Survey of recent in-service training programmes for primary teachers, using an open-ended questionnaire;
2. Examination of the training designs used in terms of the following variables:

   a) objectives

   b) clientele

   c) methods and techniques

d) resources used

e) cooperative linkages availed of

f) evaluation procedures and tools employed

g) improvement procedures;

3. Establishing categories of training designs and citing specific case studies;
4. Analysis of the delivery systems using method or technique as the constant variable;
5. Deriving types of in-service education designs;
6. Identifying growth points and gaps;
7. Deriving criteria for a workable design;
8. Proposing alternative designs specifying the seven variables.

A total of 60 in-service education projects were covered by this study. The project proponents or personnel of the agency involved in conducting the in-service education were given the questionnaire to answer. Responses were collated and tabulated, based on the seven variables. Data were analysed using frequency counts and percentages.

Current status of in-service education

Objectives

In-service education objectives were mainly competency-based, practicum-oriented and product-conscious. The primary objectives of the programmes are in this order of priority:

1. Training of skills and competencies required of teachers for new roles and programme thrusts;
2. Orientation to new concepts and values;
3. Production of instructional materials;
4. Evaluation of processes and products of programme operations;
5. Information dissemination and sharing of experiences;
6. Problem identification;
7. Project planning and development;
8. Professional advancement;
9. Strengthening of cooperative mechanisms.

Clientele

In-service education programmes were primarily designed for the following:

1. Middle-level field personnel, i.e., regional and division heads and supervisors, who were expected to echo the training at the local level for the ultimate target -- the grades teachers. The majority of them were supervisors of various subject areas;
2. Participants from the Ministry of Education and Culture (MEC) composed mostly of educational researchers, curriculum makers and subject specialists who subsequently served as resource persons in echo training schedules;
3. Participants from teacher training schools who attended when training content had implication in pre-service teacher education;
4. Participants from other ministries who were invited to share their experiences in project management, to define form and magnitude of their cooperative involvement, or when content coverage involves their agencies' programmes and work goals that need curriculum integration and teachers' functional assistance;
5. Certain socio-civic organizations and professional associations.

Methods and techniques

The most widely-used methods and techniques in in-service education were the following:

1. Group discussion, which includes open forum, panel discussion and plenary session;
2. Lectures and practicum activities which put into practice whatever knowledge was gained;
3. Practicum work which involved preparation and production of new types of learning materials, teaching devices and evaluation instruments;
4. Face-to-face interaction, the predominant method;
5. To a minor degree, distance study cum face-to-face interaction.

Resources used

Findings revealed that in-service education programmes

recently undertaken by the MEC and its sub-structures enjoyed material and personnel support from the following:

1. Other ministries;
2. Educational institutions;
3. Civic organizations;
4. International agencies like Unesco and UNICEF which gave financial assistance.

Cooperative linkages

New directions and innovations in education, particularly those aimed at countryside development through non-formal schemes, have required a more cooperative network of personnel in view of the costs involved. New policy and programme thrusts of the MEC particularly in the area of non-formal education now more than ever before have demanded multi-agency coordination and human and material assistance. Thus, in recent training programmes, the growing participation of personnel from other ministries, public and private teacher education institutions and the private sector has been very noticeable.

Evaluation procedures and tools employed

In-service education programmes were evaluated formally with the use of questionnaires, tests, attitude scales and evaluation sheets. Informal appraisal was done through verbal comments, written reaction statements and individual and/or group reports. Evaluation was mainly internal, i.e., by either the training staff or the participants. External evaluation was minimal and a big number of the training programmes were never assessed.

Improvement procedures

For improving in-service education the most common improvement procedures involved the following:

1. the use of feedback and continuous in-depth training
2. provision of additional resources
3. closer supervision and follow-up
4. strengthening linkages

Growth points and gaps

The strong features of present-day in-service education include the following:

1. Decentralized planning, i.e., regionalized planning as a result of the restructuring of the MEC and in response to the need for decentralized training;
2. Establishment of Curriculum Development Centres, Regional Science Teaching Centres, Regional Staff Development Centres and Decentralized Learning Resource Centres as effective mechanisms for information dissemination;
3. Development of local human and material resources for in-service education;
4. Change from broad to specific and operational objectives;
5. Emphasis on international inter-and intra-agency cooperation;
6. Wider base of clientele population;
7. Emergence of closer tie-up between pre-service and in-service teacher education;
8. Emphasis on research for effective media mix in conducting in-service education;
9. Stress on monitoring and visitations as evaluative measures.

On the other hand, the following weaknesses were noted:

1. Imbalanced distribution of objectives;
2. Improper choice of participants;
3. Non-involvement of clientele in planning;
4. Passive participation of some trainees;
5. Designing training course without empirical data on training needs of clientele;
6. Lack of good training materials;
7. Inavailability of competent resource persons;
8. Lack of valid and reliable evaluation tools;
9. Absence of improvement procedures.

Design formulation

Cognizant of the merits and shortcomings of present practice in in-service education, several guidelines were evolved for a workable and cost-effective design formulation.

1. It should be research-based through assessment of training needs of target clientele.
2. It should be decentralized, coninuing, and participative as a result of interactive planning.
3. It should be flexible and responsive to the three broad objective domains.
4. It should have multi-level participants who are properly screened.
5. It should employ varied and interesting training methods that consider principles of adult learning.
6. It should not disrupt teachers' regular class schedules.
7. It should maximize local human and material resources through linkages.
8. It should have a valid and reliable built-in evaluation system.
9. It should consider multi-level training design.
10. It should be field-tested in different settings.

Two alternative models were drawn based on the aforementioned criteria.

Alternative design 1

Title: In-service Education Programme for Primary Teachers and Other Personnel

Modality: Distance study (via modules) cum-face-to-face

Clientele: All primary school teachers of Pilipino and all school administrators

Time dimension: Seven months or 28 weeks in a year, continuing for two to three years (Saturdays only)

Level of training: District level

Implementing agency: Division office

Venue of contact courses: Decentralized Learning Resources Centre (DLRC)

Linkages: Institute of National Language
Educational Development Projects Implementing Task Force (EDPITAF)

Resources needed:

1. Multi-level modules on the following areas in Pilipino:
   a) reading and writing;
   b) content;
   c) teaching methodology;
   d) evaluation;
2. Four resource persons with expertise in Pilipino;
3. One radio-cassette with taped lessons covering the four areas mentioned above (optional);
4. DLRC.

Organization of participants:

The teachers shall be grouped according to the grade level they are teaching. Grades I, II and III teachers shall form Groups I, II and III, respectively. All Grades IV, V, and VI teachers shall constitute the fourth group.

Implementing mechanism:

Four days before the opening of the school, all teachers of Pilipino in the district shall meet at the district Decentralized Learning Resource Centre (DLRC) for a four-day orientation seminar-workshop. During this period the participants will be oriented on the objectives, procedures and expected outcomes of the programme. A pre-test shall be administered to the participants on the area they have chosen. This serves to facilitate the selection of appropriate modules to be studied by each participant.

Formal face-to-face instruction may be started as soon as the results of the pre-test are known. Appropriate modules will be given to participants to study. Actual use of the modules will also serve to orient them on the use of the modules.

After the four-day orientation seminar-workshop, the groups will go on Off-DLRC sessions using the modules. Groups I, II, III, and IV should be given modules good for one week, two weeks, three weeks and four weeks, respectively. The use of the DLRC should be staggered so that the groups use it alternately. After one week, on Saturday, Group I will go on to the DLRC for the summative evaluation. Lessons which are not clear to participants will be clarified by the course facilitator during this period. Enrichment lessons may also be taken up at this time. In areas where radio-cassette and taped lessons are available, the course facilitator

can use them for a similar purpose. Because this is Pilipino, one may listen to good models; hence, the appropriateness of audio media. After the day's session, Group I shall be given modules good for four weeks. The second, third and fourth Saturdays will be the turn of Groups II, III, and IV respectively, to go on to the DLRC. This cycle will go on until all groups will have completed seven days in DLRC sessions and 21 days Off-DLRC sessions with modules or a total of 28 weeks (seven months). During Off-DLRC sessions some participants may encounter problems or difficulties in their modules. Within this period, participants may avail of the services of the resource persons at the DLRC for consultation or remediation.

Evaluation:

Course evaluation should include evaluation of:

1. Attitudes of participants toward the subject;
2. Concepts and skills learned;
3. Attitudes toward the mechanics of training.

Improvement Procedure:

Results of the pre-post test will be utilized in determining the knowledge and skills gained by the participants from the programme as well as in enriching the content, emphases, and methodologies employed.

Feedback from the participants and any comments and suggestions from subject experts and educational technology experts about the modules and tapes will be used to improve these learning materials. All feedback should be turned over immediately to the head office for their use.

Results of the monitoring and follow-up of participants in the classrooms will be considered in determining improvement in their competency skills.

Alternative design 2

Title: In-service Education Program for Pilipino Teachers and Other School Personnel

Modality: Distance study - cum-face-to-face (via correspondence supported by radio broadcast

Clientele: Primary teachers and other school personnel

Time dimension: Nine months in a year continuing for two to three years (Saturdays)

Level of training: Regional

Implementing agency: Regional Staff Development Centre and MEC Regional Office

Venue of contact courses: Decentralized Learning Resource Centre (DLRC)

Linkages:
Institute of National Language;
Educational Development Projects Implementing Task Force (EDPITAF);
National Media Production Centre;
Teacher training institutions;

Resources needed:

1. Multi-level modules on the following areas:
   a. Reading and writing Pilipino in the region;
   b. Content in the region;
   c. Teaching methodology in the region;
   d. Evaluation of learning in the region.
2. Personnel of the Regional Staff Development Centre, MEC Regional Office, and the Decentralized Learning Resource Centre;
3. Radio.

Organization of participants;

Participants shall be grouped according to the multi-level areas (a-d) they have chosen to study. Since there are four areas of concern, four groups should be organized for teachers. The administrators' group should be separated from the teachers. However, the grouping of the school administrators should also be according to the area they have chosen.

Implementing mechanism:

Before the opening of the school year, the teachers and school administrators will have a one-week orientation and formal contact courses in their respective district Decentralized Learning Resource Centre. The course facilitator in the DLRCs will come from the DLRC or Regional Staff Development Centres or the

Regional Office or the Divison Office. In the administrators' group, stress should be given on the supervision of Pilipino instruction.

After the one-week orientation and formal contact course, participants will return to their respective stations with an initial number of modules good for three weeks. Any participant who completes his lessons will answer the evaluation materials found in the modules and send them to the Regional Staff Development Centre in the region for correction. The Centre in turn will send additional lessons good for three weeks. This procedure will go on for nine months.

During the correspondence course period, there will be a regular two-hour week-end open radio broadcast. The radio broadcast lessons shall cover the anticipated difficult lessons covered in a week's time. The time schedule of the radio broadcast shall be made known to the teachers in advance.

At the end of the school year, the teachers and school administrators will undergo a three-week formal contact course at their district DLRC. During this period, the participants will be evaluated. The lessons which the participants find difficult will be taken up further during the contact course period. Enrichment lessons will also be given by the course facilitator.

Course evaluation:

The evaluation system in Alternative Design I will be employed. This consists of:

1. Attitude toward Pilipino as a language;
2. Evaluation of the process of training;
3. Evaluation of content of training; and
4. Evaluation of the product of training.

Improvement procedures:

The results from the evaluation materials in the modules, the formative evaluation and the course evaluation conducted at the end of the training programme will be used to improve the structures, processes, and methodologies of the programme.

Evaluation of the total system:

To evaluate the total system it is necessary to determine the relationships of the process or stages of activity from planning to

final implementation. In fact, the evaluation starts from the training needs identification and its relevance to the content and appropriateness to the method or modality. The evaluation system should itself be evaluated by systems analysts and subject matter experts.

Synthesis and conclusions:

The present study investigated the process of formulating designs for in-service education from a review of trends of historical perspectives and a description of the current state of the art that included study of cases. Strong and weak points of some designs were subsequently determined to derive some guidelines for design formulation.

The study evolved a 10-point set of criteria which became the basis for two alternative designs.

Chapter Four

EVALUATING IN-SERVICE EDUCATION FOR PRIMARY TEACHERS

Organizers, participants and interested observers of in-service education are increasingly aware of the need and importance of evaluation. They are also aware that such evaluation should, as far as possible, be scientifically conducted, be comprehensive in scope, be sensitive to all relevant issues and that the feedback should be purposefully utilized. It is no longer sufficient to rely on intuitive, subjective and informal evaluation . This is because evaluation data should be useful to the organizers of the programme. Also it should be communicated to relevant and interested agencies, particularly those responsible for funding and decision-making.

The nine countries participating in the Meeting reported on the evaluation which they have carried out for some of their programmes. Various areas and aspects of the programmes have been evaluated and a number of methodologies and procedures have been employed.

The variety of in-service education programmes for primary teachers conducted in the nine countries can be grouped in the following ways:

1. duration of the programme:
   - short-term
   - long-term
2. strategy of the programme:
   - face-to-face
   - distance
   - correspondence-cum-contact
3. methodology of the programme, e.g.
   - lecture
   - correspondence
   - use of multi-media such as radio, TV
4. certification of participants:
   - credit
   - non-credit

Based on the reports of the participating countries, the various types of in-service education programmes may be grouped as follows:

Country	Type of Programme				
	Short Course	Long Course	Distance Programme	Distance & Contact	Multi-Media
Bangladesh	✓	✓	-	✓	-
India	✓	✓	✓	✓	✓
Indonesia	✓	✓	✓	✓	✓
Malaysia	✓	✓	-	✓	✓
Nepal	✓	✓	✓	-	✓
Papua New Guinea	✓	✓	✓	✓	-
Philippines	✓	✓	✓	✓	✓
Republic of Korea	✓	✓	✓	✓	✓
Thailand	✓	✓	✓	✓	✓

For evaluating the programmes, a variety of methods and procedures have been employed by the participating countries. These can be summarized as follows:

1. Questionnaire, inventory, evaluation sheet, and written tests administered to the participants before, during, and immediately after the programme;
2. Report of organizers, supervisors and observers;
3. Oral discussion with participants;
4. Report of on-the-spot study visit of a programme in action by organizers, supervisors and observers;
5. Self-reporting of participants.

On the whole the quantity and quality of evaluation in all the countries need to be given greater attention. It is common knowledge that there is a need for more scientific evaluation, for better formulation of design and methodology, and for the effective dissemination and utilization of evaluation data. All these aspects of evaluation are necessary in determining appropriate

action to be taken for improving future programmes.

It is, of course, difficult to undertake scientific and comprehensive evaluation of all the programmes. This is because each participating country undertakes a large number of programmes each year involving a large number of teachers. Furthermore, constraints of time, funds and personnel prevail in each country. But the experiences of the nine participating countries put together have been of great help in giving insights into the complexity of the evaluation process, and have assisted in the formulation of better design and methodology of evaluation.

The term "evaluation" tends to have different meanings when used by different people and when used in different contexts. With regard to in-service education, "evaluation" can be defined as a process of determining the value or worth or success of a programme in achieving the predetermined objectives. The programme refers to activities of training, orientation or exposure that have been specially planned and executed for a selected clientele.

The purposes of evaluating in-service education could be many. In general, however, it can be said to have two major purposes:

1. To assess the extent of improved/added competence of the participants as a result of the programme in order to assist in the formulation of subsequent course of action; and
2. To assess the extent of the success/effectiveness of the programme and to identify its areas of strengths and weaknesses in order to help improve future programmes.

In line with the above definition and purposes of evaluation, the scope for the evaluation of in-service education can be focussed on two major areas. The first is one that focusses on the participants, i.e., the extent to which the behaviour of the participants have changed as a result of the programme. Such an evaluation would include examination of the behaviour of the participants before the programme, immediately after the programme and some period after the programme when the participants have had sufficient time to incorporate into their daily practices the ideas acquired through the programme. A number of research designs could be used for this evaluation such as:

1. Post-test only, one group design;
2. Pre-test-post-test, control group design.

The other area that evaluation can focus on is the programme itself, i.e., the extent of the effect of the planning and execution of the programme in its attempt to effect desired changes in the participants. Such an evaluation would examine factors pertaining to the execution of the programme itself such as the content and techniques of presentation of the programme; the factors pertaining to the participants such as their incentives and motivation in following the programme; and the factors pertaining to the planning and organization of the programme such as the congruence of objectives and content of the programme. For a thorough and comprehensive evaluation of any programme, both areas have to be looked into.

Ideally, all the desired behaviour change should be considered in evaluating participant competence. As in-service education is essentially concerned with improving the teaching-learning process, some aspects of the desired change would include those pertaining to the participants' knowledge, attitude, awareness, perception, interest, motivation, and skills. It is also necessary to take note of unintended behavioural change, positive or negative, on the part of the participants.

In evaluating the success of a programme, a large number of factors have to be considered. Some of these are listed below:

(1) Area of Evaluation	(2) Aspect of Evaluation	(3) Criterion of Evaluation	(4) Method of Data Collection
The programme in action	objectives of programme	clarity, relevance, adequacy	questionnaire, interview, document analysis, informal comments
	content of programme	relevance, adequacy, innovativeness, development-orientedness	questionnaire, interview, observation, document analysis, written test, informal comments
	methods/ techniques of presentation	appropriateness in relation to content, appropriateness in relation to clientele, effectiveness, efficiency (in use of time and resources), innovativeness	questionnaire, interview, observation, informal comments

(1) Area of Evaluation	(2) Aspect of Evaluation	(3) Criterion of Evaluation	(4) Method of Data Collection
	venue	accessibility, conduciveness of atmosphere to work, adequacy of facilities	questionnaire, interview, observation, informal comments
	duration and timetable	effectiveness, feasibility	questionnaire, interview, informal comments
The participants	selection of participants:		
	a) criterion	appropriateness, clarity	questionnaire, interview, document analysis, informal comments
	b) procedure	feasibility	
	characteristics of participants e.g., age, sex, marital status	appropriateness of match between participants and programme	questionnaire, interview
The planning and organization of programme	planning	comprehensiveness, consistency of programme objectives and programme activities, involvement of relevant agencies	interview, document analysis, informal comments
	support of the community and other relevant agencies	adequacy of support	interview, informal comments
	budget	adequacy	interview, informal comments

The evaluation of any in-service education programme is a task that requires time, funds, personnel and expertise. Such resources are not adequate in the participating countries. Therefore, any evaluation has to be planned thoroughly so that the resources required are reasonable and within the means of the country. It is also important to note that the planning and administration of evaluation and the processing and interpretation of data are complex processes. It is, therefore, essential that sufficient attention is given to these matters so that efforts of evaluation would not be futile.

The development of valid and reliable instruments for evaluating the various aspects of in-service education is indeed a difficult task. It requires the co-operative effort of teachers, organizers, head teachers, supervisors, and even external consultants. In particular, it is extremely difficult to develop instruments which could isolate the effects of the programme from all other factors in the evaluation of teacher competence at some period after the programme has been conducted. However, efforts must be made to evaluate as many in-service programmes as possible. Without reliable feedback it may not be possible to know what exactly is happening and in what direction to proceed. In the attempt to facilitate the evaluation of in-service education in the participating countries, the members of the group which deliberated on the topic of evaluation developed some guidelines in evaluating in-service education programmes. These are presented in the next section.

Some guidelines in evaluating in-service education programmes

The participants may be tested before joining the in-service training course, during the course, and after the course. As a follow-up, the participants may again be tested at least six months after the course. The testing before, during, and immediately after the course can be conducted by the agency responsible for organizing the course. The follow-up testing of participants can be done by the organizers, supervisors, or head teachers. The broad areas for testing participants are given in Table 1, but details have to be worked out to suit the particular programme.

Table 1. Evaluation of participants

Area	Suggested Technique	Suggested Time Schedule
knowledge	written test, interview	before the course, immediately after the course, at least six months after the course

Area	Suggested Technique	Suggested Time Schedule
skill	written test, observation	during the course, immediately after the course, at least six months after the course
attitude and behaviour	observation, questionnaire, self-reporting	during the course, after the course, at least six months after the course
overall competence	pupil performance, attitudes, and perceptions	six months or more and periodically after the course

Overall evaluation (State briefly)

Strong points:

1. _____
2. _____
3. _____

Points needing improvement:

1. _____
2. _____
3. _____

Remarks: _____

_____

_____

Evaluation of the programme as a whole can be done at the national, state, or district levels, for the following components:

1. Objectives of the programme;
2. Theme of the programme;
3. Learning activities and methodologies used in the programme;
4. Administration of the programme.

A variety of scales can be used such as the agreement-disagreement scale, frequency scale, adequacy scale, and intensity scale. The areas of evaluation and the type of scale that may be used are given in Tables 2 to 5.

A number of points need to be considered in connection with the scales that are presented in this section.

1. Five-point scales may be reduced to four-point scales if the evaluator wishes to avoid the tendency of some respondents to tick the mid-point of the five-point scale.

2. The statements in the tables are mainly suggestions. Some statements may be added, others deleted, and still others re-worded for emphasis. For example, rural community (Table 3, Number 1) can be changed to urban or disadvantaged whichever is appropriate in describing the community to which the clientele belongs.

3. There may be need to provide explanations for some of the terms used, e.g., Very Adequate vs. Adequate or Very Much vs. Much, in order that both the evaluator and the respondent would have a common frame of reference.

4. In table 5, where a continuum is presented, specific points on the scale should be clearly marked to facilitate analysis of data.

5. Each table should be accompanied by a set of instructions for both the evaluator (how to administer the scale) and the respondent (how to answer the scale). The length and specificity of instructions would depend on the familiarity of the participants with the type of scale being presented to them and the complexity of the scale (ticking vs. written statements).

Table 2. Evaluation of objectives

Put a tick (/) in the appropriate column.

Aspect	Very Ade-quate	Ade-quate	Inade-quate	Does Not Apply
1. Specificity and clarity of objectives				
2. Consultation with the partici-pants, teachers and/or supervisors in the formula-tion of the objectives				
3. Objectives are stated in terms of behavioural changes				
4. Relevance of the objectives to the needs of the partici-pants				
5. Consistency of the objec-tives with the overall programme of development				
6. Relation of the objectives to rural development				
7. Ability of the objectives to promote the capabilities of the participants				

Overall evaluation (State briefly)

Strong points:

1. _____
2. _____
3. _____

Points needing improvement:

1. _____
2. _____
3. _____

Remarks: _____

_____

_____

Table 3. Evaluation of theme

Put a tick (/) in the appropriate column.

	Very Much	Much	Moderate	Little	Not at all
1. How well does the theme reflect the needs of the rural community?					
2. How relevant is the theme to the needs of participants?					
3. Is the theme consistent with the overall programme of development?					
4. Is the theme in line with the subject discipline?					
5. Does the theme promote the capabilities of the participants?					
6. How much does the theme focus on each of the following:					
a) development of productive skills					
b) integrated rural development					
c) health and nutrition					
d) universalization of educational opportunities					
e) new curriculum; new content; new teaching-learning strategies					

Overall evaluation (State briefly):

Strong points:

1. _____
2. _____
3. _____

Points needing improvement:

1. _____
2. _____
3. _____

Remarks: _____

_____

_____

Table 4. Evaluation of learning activities and methodologies

Put a tick (/) in the appropriate column.

Aspect	Strongly Agree	Agree	Un-decided	Dis-agree	Strongly Dis-agree
1. Planning of the activities was done in advance.					
2. The learning activities and methodologies are consistent with the programme objectives.					
3. The learning activities and methodologies are designed to create self-learning.					
4. The learning activities and methodologies used in the programme encourage creativity.					
5. The methodologies used are appropriate to the subject matter.					
6. The activities used are applicable to different school situations.					
7. The instructional materials are readily available.					
8. The instructional materials are effectively used.					
9. Summaries of the lessons are useful to participants.					

Overall evaluation (State briefly)

Strong points:

1. _____
2. _____
3. _____

Points needing improvement:

1. _____
2. _____
3. _____

Remarks: _____

_____

Table 5. Evaluation of administration

1. The planning was done

   by only one individual ——— cooperatively

2. The budget was

   insufficient ——— sufficient

3. The venue was

   inaccessible ——— readily accessible

4. The timetable was

   very inconvenient ——— convenient

5. The programme was

   inflexible ——— flexible

6. The participants participated

   passively ——— actively

7. Opportunities for interaction were

   infrequent ——— frequent

8. The programme of follow-up activities was discussed

   inadequately ——— adequately

9. How much support was given by related agencies?

   None ——— Very much

Overall evaluation (State briefly)

Strong Points:

1. _____
2. _____
3. _____

Points needing improvement:

1. _____
2. _____
3. _____

Remarks: _____

_____

Other types of evaluation may be used such as projective techniques including sentence completion and critical incident techniques. Below are examples:

Sentence Completion Technique

1. If I were to conduct the seminar I would _____
   _____
   _____

2. I feel that more participation could have been elicited by _____
   _____
   _____

Critical Incident Technique

1. Name one particular incident during the seminar which presented a problem to you.

2. How was the problem solved by you/for you?

3. What was the result of the solution of the problem?

One other area for evaluation which requires particular attention is that of cost-effectiveness. Special in-service training would be necessary for educators to carry out evaluation relating costs to benefits, an activity in which they have not had much experience.

The ultimate evaluation of an in-service programme, it must be emphasized, is not on the programme itself nor on the participants, but on the pupils - to what extent they increase their learnings or manifest behaviour change as a result of their teachers' improved performance. The relationship between in-service training of teacher and impact on pupil performance is a major area of concern to which educators must address themselves in the future.

Chapter Five

GUIDELINES ON FORMAT OF NATIONAL STATUS STUDIES

An important part of the Joint Innovative Project is the national status study of in-service primary teacher education. In the following sections, guidelines on format of national studies are given. The first section covers the rationale, objectives, statement of the problem, definition of terms and delimitation of the study. The second section presents the methodology and design of the study. This is followed by the historical background in three sub-sections based on study of documents. Analysis and interpretation of the data relating to the state of the art is presented in the fourth section and alternative schemes for improving in-service education in the fifth section. The study ends with findings and conclusions.

The format of the study

Introduction

1. Rationale

   Justification for undertaking the study will be stated; individual countries may like to emphasize the improvement of in-service primary teacher education.

2. Objectives

   a) To collect baseline data for strengthening the programme of in-service education

   b) To study the resources and other facilities available and the extent of their utilization

   c) To study various programmes, classify them, and review their effectiveness

   d) To study methods of evaluation followed to understand the attainment of objectives of the programmes

   e) To study the problems met in the development of in-service education programmes.

   f) To suggest alternative designs for in-service education reflecting methods and improvement procedures.

3. Statement of the problem

The countries in the region have expanded primary education facilities rapidly. This has resulted in a big increase in the number of primary school teachers. The changes in curriculum content, methods of teaching and learning, evaluation of pupil achievement, and in expectations of the society have necessitated reshaping of the pre-service and in-service programmes for primary teachers. This implies revision of programmes and also the approaches using modern techniques of education. Thus it becomes necessary to undertake analytical and critical studies of structures, methods, contents, approaches of in-service education.

4. Definition of terms

In-service education is defined as continuing programme of training to raise the competencies implying updating and upgrading of knowledge, skills, and changing of attitudes.

Operational definition of terms used in the study may be given here.

5. Delimitation of the study

Delimitation of the study may be stated by each country in terms of scope of the study covering:

a) clientele (teachers, teacher educators, supervisors, administrators, etc.)

b) agencies (national, state, provincial, regional, local bodies, training institutions, voluntary organizations, TV and radio etc.)

c) programmes

d) period of study (a minimum of five years)

Methodology

It is desirable to describe methodology of study relating to the following:

1. General design

giving dimensions and criteria of study, a sampling design, time schedule.

2. Subjects

responding institutions, individuals, programmes.

3. Methods and tools

Survey method will be used for this study.

a) Questionnaire, opinionnaire, interview schedules, observations, visits to institutions and programmes as tools;

b) Implications of using different tools in relation to time, cost and expertise;

c) Development, tryout, revision and finalization of tools.

4. Analysis scheme.

Historical background

1. The educational system in relation to the socio-economic and political background;
2. In-service teacher education in its historical perspective up to the time of this study;
3. In-service primary teacher education during the decade preceding the study.

/This part will be based on the study of documents. Details of this section may be determined by individual countries./

Present status of in-service education

The data collected may be analysed in terms of types of programmes, analysis of programmes, analysis of contribution of agencies, problems in the conduct of programmes, and strengths and weaknesses.

1. Types of programmes

The programmes may be classified under different headings like: demand or need, e.g. (i) programme conducted on the basis of a national need, (ii) programme needed in view of some changes introduced in the subject content, and (iii) programme needed by teachers in view

of the problems that they have faced. A list of classificatory variables is suggested below:

a) Demand or need;

b) Subject content;

c) Pedagogy;

d) Approach.

2. Analysis of programmes

In this sub-section the in-service programmes may be analysed under different headings for example:

a) Planning;

b) Structure;

c) Method;

d) Use of resources;

e) Linkages with other agencies;

f) Evaluation;

g) Improvement procedures.

3. Analysis of contribution of agencies

Many agencies are involved in the conduct of in-service education programmes. Analysis presented here may give the contribution of various agencies in terms of the types of programmes conducted by them. Again, some agencies may be specializing in certain activities only, or they may be in a position to supply only resource persons. An analysis of contribution of various agencies in terms of the following variables may be given:

a) Programmes;

b) Activities;

c) Resource persons;

d) Time duration;

e) Timing.

4. Problems in conduct of programmes

Various problems faced in the conduct of in-

service education may be described here.

5. Strengths and weaknesses

In terms of

a) Planning of programmes;
b) Availability and use of resources;
c) Follow-up activities;
d) Incentives;
e) Others (please specify).

Alternative schemes for improving in-service education

On the basis of the study, alternative schemes for the future may be suggested:

1. Objectives (competency-based, attitudinal);
2. Structure;
3. Methods and techniques;
4. Use of resources;
5. Linkage with other institutions;
6. Evaluation procedures;
7. Improvement procedures.

Findings and conclusions

Bibliography

Appendices

The study may include, apart from in-service education of primary school teachers, the programmes for other educational personnel including staff of teacher training institutions, supervisors, administrators, and educational specialists relating to primary education.

Chapter Six

DEVELOPMENT OF ALTERNATIVE SCHEMES FOR IMPROVING IN-SERVICE PRIMARY TEACHER EDUCATION

Introduction

Both the Philippine status study and the national preliminary studies of the countries represented in the Initial Planning Meeting highlighted the importance of research and evaluation in the field of in-service education for primary teachers. A study of the variables that influence the quality of in-service programmes should be undertaken as part of the national effort to improve in-service programmes. This consideration formed the basis for the task of formulating guidelines for the development of alternative schemes for improving in-service primary teacher education in the participating countries.

The Meeting adopted the following procedure in its deliberations:

1. Determining the categories of teachers needing in-service training;
2. An analysis of innovative patterns of training which have been planned/implemented in the participating countries;
3. A synthesis of country experiences leading to the discussion of factors which have to be considered in the formulation of alternative schemes for the improvement of in-service programmes.

Types of in-service primary teacher training

There is a wide range of competence of teachers and a variety of in-service programmes designed for them in the participating countries. Teachers can be classified under four categories, namely:

1. Qualified and trained;
2. Qualified but untrained;
3. Underqualified but trained;
4. Underqualified and untrained.

In considering the categories of teachers, a distinction is made between academic qualifications and professional training. The academic qualifications required by national authorities vary from country to country. At the same time, professional training could be divided between initial or basic upgrading of teachers on the one hand, and advanced or specific updating on the other. For example, an academically qualified but professionally untrained teacher would need basic professional training while a qualified and trained teacher would merely need an updating programme on a short-term basis concentrated on specific areas of need or on a longer term scheme of study at an advanced level. Again, an academically underqualified teacher may need a programme for academic upgrading, for example, to acquire a higher national certification or a university degree.

The following table depicts the different categories of teachers and the types of in-service programmes that they would need.

Table 1. Categories of teachers and types of in-service programmes

	Types of In-Service Programmes			
		Professional		
	Academic	Upgrading (basic)	Updating (advanced)	Updating (specific)
I. Qualified and trained	3	3	2	1
II. Qualified but untrained	3	1	2	2
III. Underqualified but trained	1	3	2	2
IV. Underqualified and untrained	1	1	3	2

Key: 1 - top priority
2 - priority
3 - low priority

Some innovative schemes of in-service training in participating countries

The experiences of the various countries represented in the Meeting display a wide variety of treatment in the planning, implementation and evaluation of in-service programmes to cater to national needs and priorities. However, each country has incorporated innovative features in its attempt to develop alternative

schemes of in-service education. Some examples of these schemes are given below.

In Bangladesh, the Thana Training and Development Centres (TTDCs) offers an example of maximum use of resources for the purpose of training at the local level. These centres provide facilities to the various nation-building agencies like Agriculture, Cooperative, Public Health and Family Planning, among others, in holding conferences, seminars, workshops, etc. The expertise of local administrative officers, technical persons, and experienced secondary school teachers are tapped and utilized. These centres are now being used more and more for the in-service training of the primary school teachers on a continuous basis in order to minimize cost.

The primary objective of the in-service programme in India is to enrich the teachers' knowledge of subject areas and to increase their professional competencies. To further improve the implementation of these programmes, it is planned that greater utilization be made of distance-learning techniques by strengthening the services of the All India Radio, the provision of radio sets to all primary schools, and the production of handbooks to be used with the radio programmes.

The mobile training scheme in Indonesia is an effective strategy in improving the quality of teaching and learning in primary schools. This training scheme is supported by a series of 20-minute radio programmes and the distribution of learning materials for the use of teachers.

A major problem in Malaysia is the provision of adequate in-service training for potential teacher educators. To prepare these personnel for their new roles in teacher training colleges, a systematic programme has been prepared jointly by the Teacher Training Division, and the Ministry of Education Staff Training Institute (MESTI). The use of pre-course reading materials in this programme makes it possible to reduce the actual contact session to three weeks. The delivery system for the contact session combines lectures and seminars with an optional mini-course, a practicum and built-in evaluation.

In Nepal, the Radio-Education Teacher Training Programme is aimed at upgrading underqualified and untrained teachers in remote areas. This programme consists of an introductory phase of 15 days followed by a series of radio broadcasts covering the entire training curriculum, and finally a month's contact-session. At the end of the training period of approximately one year, the participants are examined for purposes of certification.

Papua New Guinea addresses itself simultaneously to upgrading the academic qualifications of serving teachers as well as providing them with further professional training in its Grade 9 and Further Training Programme. Each component (academic and professional) lasts for six months in the one-year training programme.

The Community-based Extension Training Programme in Thailand also seeks to upgrade both the academic qualification and professional competency of teachers. This programme consists of nine sets of training courses and lasts for three consecutive years. In this programme, teachers colleges in the same region jointly prepare distance-learning materials and conduct contact-sessions for primary school teachers to update their professional competencies and to assist them in earning a higher qualification. The primary school authorities in the local areas are actively involved in the administration and management of the extension training centres.

The Institute of In-service Education for Primary School Teachers in the Republic of Korea is primarily responsible for the in-service training of primary school teachers. The Institute, in collaboration with the Ministry of Education and Provincial Boards of Education, conducts three programs, namely: the General Course, the School Administrators Course, and the Special Course during the summer or winter vacation for a duration of 240 hours or about eight weeks. These programmes are designed to upgrade the competency of primary school teachers. More specifically, the General Course aims to upgrade the status of teachers; the School Administrator Course is offered to train school principals and vice-principals; the Special Course aims to help teachers develop specific skills and techniques in specific subject areas such as music, fine arts, physical education, science, Korean language, social studies, and mathematics.

In the Philippines, the University of the Philippines and the Division of Rizal (U.P.-DOR) project on remedial education is an example of collaborative effort in the phases of needs assessment, programme design, implementation in the field, and follow-up action of an in-service programme. An important feature of this programme is the involvement of teachers and supervisors in the planning of the programme and the inclusion of subject supervisors in the training course for remedial teachers. This strategy is designed to increase articulation between the teacher trainees, the supervisors, and future trainees in echoing the training. To maximize the use of the training, principals of the schools where the trainees come from undergo a capsule version of the in-service course given to the teachers in order to ascertain their cooperation in the implementation of the

echoing of the experiences of the U.P. trainees. The UP-DOR programme underscores the importance of participatory planning and the involvement of the local government from the planning phase so that its cooperation in the implementation phase can be obtained.

Factors to be considered in developing alternative schemes for improving in-service programmes

Several factors influence the planning, implementation, and evaluation of in-service programmes. These are:

1. Delivery systems;
2. Training of teacher educators;
3. Resources for in-service training;
4. Decentralization of programmes;
5. Evaluation and feedback system;
6. Built-in motivation system;
7. Research-oriented in-service programmes.

Delivery systems

1. Face-to-face training - Though the traditional face-to-face training has proven advantages over other delivery systems, its use is prohibitive because of high-cost factors. Therefore, the duration of this face-to-face training needs to be reduced by adopting alternative techniques like the use of self-learning materials, radio broadcasts, and correspondence. It should, however, be noted that face-to-face training should be adopted at least as part of the delivery system to improve the effectiveness of in-service programmes.
2. Radio and TV programmes - The use of radio and television can be very effective in in-service training. However, this delivery system requires built-in evaluation and feedback that would help monitor the effectiveness of the programme. The following activities could improve programme implementation:

   a) Identifying the teachers for whom the programme is devised;

   b) Supplying adequate reading materials to supplement the radio broadcasts;

c) Organizing face-to-face contact-sessions as part of the programme;

d) Making cassette recordings of programmes available at selected centres for the reference of teachers.

3. Seminar-workshops - Though seminar-workshops have been a regular delivery system in in-service training programmes, they should be used only as one component in the total programme. Specially prepared instructional materials should precede and supplement the seminar-workshops to enhance the effectiveness of training.

4. Open education system - In some countries where the open education system is available, more primary teachers should be encouraged to take advantage of it. Under this system teachers could take the degree examination privately at their own expense. The following are suggested for the improvement of this delivery system:

a) Self-learning materials should be made available to teachers at low-cost or no-cost;

b) Teacher/resource centres should be used for contact-sessions;

c) Face-to-face training should be an integral part of the system.

Training of teacher educators

The problems of primary teacher training differ from that of secondary teacher training in several ways. The major problem, however, has been the isolation of primary teacher educators from the actual problems of teaching in primary schools. Programmes should be developed to acquaint the primary teacher educators with the situation in primary schools. Regular improvement programmes should be organized for primary teacher educators to make teacher training at this level relevant and need-based. In-service primary teacher training should be a joint effort of teacher educators and other educational personnel (headmasters, supervisors, etc.). Since most of the teacher educators have a secondary school orientation, a special programme should be developed to prepare them for their roles as primary teacher educators.

Resources for in-service training

A key factor in the effectiveness of in-service programmes is the skillful utilization of available resources. This will not

only improve the quality of the programmes but also help reduce the costs of training. The following measures can be considered:

1. Use of radio broadcasts
2. Maximum utilization of local resources
3. Organization of in-service training during school vacation
4. Making in-service training an integral part of the duties of supervisors
5. Organization of in-service training for specific purposes for relatively shorter duration.

Decentralization of programmes

There is a need for the National Ministry of Education to support and finance the in-service training of primary teachers. However, in-service programmes should be planned, developed, and implemented at the local level. This would make it possible for local needs to be emphasized and for better supervision. The decentralization of programmes would also allow for maximum utilization of community resources by coordinating the in-service training of primary teachers with community-based training programmes.

Evaluation and feedback system

A built-in mechanism of formative and summative evaluation should be an integral part of the total package of in-service training. An innovative method in this area is the involvement of all related agencies in the planning stage and in the evaluation programme. The findings of the evaluation exercise should guide the further development of future in-service programmes.

Built-in motivation system

In-service training is basically aimed at assisting teachers to be professionally competent and effective in the classroom. Therefore, the initiative to learn should come from the teachers themselves. The education system should create mechanisms to sustain motivation for self-learning among teachers. The emphasis in all programmes should be to develop positive attitudes among teachers towards in-service training. The following are suggested as measures to promote self-motivation:

1. Involving the classroom teachers in planning and development of in-service programmes to give them the feeling that these programmes are their own;

2. Making the programme a continuous process for professional upgrading;
3. Giving due recognition to teachers who attend these courses;
4. Providing handouts and other instructional materials for the teachers as a token benefit for attending these in-service training programmes;
5. Providing well-equipped teachers centres.

Research-oriented in-service programmes

The problems of classroom teaching demand action research for their solution. In view of this, teachers should be exposed to the basic methodology of research so that they can undertake simple studies with the end in view of improving their performance in the classroom. The following are suggested for the development of research-oriented in-service programmes:

1. Teachers should be exposed to basic research methodology.
2. They should be involved in the planning and development of action research programmes.
3. In-service programmes should provide opportunities for the discussion of progress in research and the dissemination of research findings.
4. The research findings should lead to the development of programmes for future research.

ANNEX I

AGENDA

1. Opening of the Meeting

2. Election of officers of the Meeting

3. (a) Review and examination of national efforts and initiatives in improving and expanding in-service education; and

   (b) National plans and methodologies of research and evaluation, to be conducted in the light of papers and the preliminary status studies brought by the participants

4. Consideration of the national status study of the Philippines

5. Evaluating in-service education for primary teachers

6. Field visit to project/institution

7. Guidelines on format of national status studies

8. Development of alternative schemes for improving in-service primary teacher education

9. Consideration and adoption of the draft report of the Meeting

ANNEX II

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ANNEX III

LIST OF DOCUMENTS

ROEAO-80/APEID-IMP. ETOP/INF 1	General Information Paper
ROEAO-80/APEID-IMP. ETOP/1	Annotated Agenda
ROEAO-80/APEID-IMP. ETOP/2	Provisional Schedule of Work
ROEAO-80/APEID-IMP. ETOP/3	Preliminary Report of In-service Education in Bangladesh by Mohammad Nurul Islam, Abdus Salam Akond, and Syed Shamsul Khalque
ROEAO-80/APEID-IMP. ETOP/4	Preliminary Status Study of In-service Primary Teacher Education in India by D.N. Abrol, Atma Prakash, and R. Krishnamurthy
ROEAO-80/APEID-IMP. ETOP/5	In-service Primary Teacher Education in Indonesia by Agus F. Tangyong
ROEAO-80/APEID-IMP. ETOP/6	In-service Education for Primary School Teachers in Malaysia by Goh Keat Seng, Siti Hawa Bte Ahmad, and Wan Teh Aminah Bte Wan Man
ROEAO-80/APEID-IMP. ETOP/7	In-service Education of Primary Teachers in Nepal by Kedar Nath Shrestha
ROEAO-80/APEID-IMP. ETOP/8	In-service Education of Primary Teachers in Papua New Guinea by Daera Reid, Ronnie Benson, and Patrick Modakewau
ROEAO-80/APEID-IMP. ETOP/9	In-service Education for Primary Teachers: Design Formulation by Lourdes S. Sumagaysay, Salustiano F. Faigao, George R. Garma, and Lucy U. Eleazar

ROEAO-80/APEID-IMP. ETOP/10	A Study on In-service Education for Primary School Teachers to Suggest Alternative Designs in Korea by Yong-Duck Paik, Sang-kyun Suh, and Joon-Youl Park
ROEAO-80/APEID-IMP. ETOP/11	In-service Education for Primary Education: History, Trends and Alternatives by Sunthorn Kumtanode, Supol Wuthisen, and Chitrakorn Tangasemsuke
ROEAO-80/APEID-IMP. ETOP/12	Keynote Address by Deputy Minister Abraham I. Felipe
ROEAO-80/APEID-IMP. ETOP/13	Programme Evaluation by Dr. Milagros D. Ibe
ROEAO-80/APEID-IMP. ETOP/14	Strengthening the Research and Development Components of In-service Education Programmes by Dr. Josefina R. Cortes

ANNEX IV

FIELD TRIP TO PROJECT/INSTITUTION

As part of the activities of the Initial Planning Meeting, a field trip was made to Taytay Elementary School, district of Taytay, province of Rizal, on Thursday, 28 August, 1980. The school is one of the institutions involved in the University of the Philippines and Division of Rizal (UP-DOR) training programme in remedial instruction for teachers of Reading, Language, and Mathematics. This programme is an example of a client-initiated in-service primary education project.

The objectives of the field trip are as follows:

General:

To gain insights into the planning, implementation, and evaluation of an in-service primary education programme.

Specific:

1. To understand how the UP-DOR in-service education programme came to be
2. To discuss with people directly involved in the programme how it was planned, implemented, and evaluated
3. To observe classes taught by some programme trainees
4. To discuss follow-up strategies used by the Division of Rizal to maximize effects of the in-service education programme

A paper was prepared by the College of Education, University of the Philippines, outlining the essential features in: a) problem identification and programme planning; b) implementation; and c) evaluation and follow-up of the Project. It provided the participants with the necessary background information before the visit. These features were further discussed at the Taytay Elementary School by Superintendent Pilologo Pante and two supervisors; Dean Paz G. Ramos and her faculty members; and two trainees of the University of the Philippines and Division of Rizal (UP-DOR) training programme.

The Project's main thrust is to develop remediation skills for all elementary school teachers in the Division of Rizal in the areas of Communication Arts (English and Pilipino) as well as in Mathematics. The strategy used was to train at the University of the Philippines 20 key teachers each in Language Teaching, Reading and in Mathematics. These key teachers were expected to multiply at the district and school levels the skills they had acquired from the training programme. The training was done for 22 days in May 1978. The echoing was implemented during the 1978-1979 academic year. A notable feature in the training programme was the inclusion of two subject area supervisors along with the key teachers. Echo training continues to the present. It is hoped that by academic year 1980-1981, all elementary school teachers would have undergone training on remediation through the UP trainees.

Emphasis was given to the humanistic approach at all stages of the programme. A conceptual framework of remediation was provided to give the trainees the necessary background to attempt diagnosis in the classroom, to apply group remediation, and elicit greater pupil participation. The experiences, knowledges, and skills gained in the programme have been echoed by the trainees in the two years since their training at the University of the Philippines. Demonstration lessons have been done by the key teachers in the two subject areas. It was emphasized that the methodology employed in the entire programme was for large group remediation rather than clinical or individual remediation because of time and other constraints. Two key teachers showed how this could be done in separate demonstration lessons, one in Grade 4 Mathematics, the other in Grade 3 Communication Arts (English) during this field trip.

An interview system of evaluation has been established through progress reports by the key teachers, as well as tests of the pupils at the district level.

In the open forum following the panel discussion, the need for a formal evaluation of the Project was pointed out. It was reported that descriptive and qualitative feedback and evaluation have been done by the Division of Rizal. A continuous follow-up of the trainees to ascertain that their training is maximally used has been done under the leadership of Supt. Pante and two subject area supervisors. It was felt, however, that a

well-designed evaluation study should be undertaken jointly with the College of Education to assess the impact of the training programme and to identify areas where additional training is needed.

The discussions and other activities during the field trip underscored the importance of client participation and involvement in the planning, implementation and evaluation of an in-service education programme.

ANNEX V

JOINT INNOVATIVE PROJECT ON IN-SERVICE
PRIMARY TEACHER EDUCATION - INITIAL PLANNING MEETING

EVALUATION QUESTIONNAIRE

Part I: Please put a check (✓) in the column which most closely approximates your answer to each of the following questions:

	Very Much	Much	Moderately	Little	Not at all
1. How well did you understand the objectives of the Meeting before it began?					
2. How much preparatory reading on in-service education did you do before you came for this Meeting?					
3. How would you rate the amount of work that you put in for this Meeting?					
4. To what extent has the programme					
a) given you insights on in-service primary teacher education?					
b) given you an overview of in-service education in the region?					
c) prepared you to design in-service training programmes for your country?					
d) updated your knowledge of evaluation of programmes?					
5. How helpful has the national status study of the Philippines been to this Meeting?					

	Very Much	Much	Mode-rately	Little	Not at all
6. How much did you benefit/ learn from each of these activities in the programme?					
a) Lectures of resource persons					
b) Discussions with the resource persons					
c) Country reports					
d) Small group discussions					
e) The field trip					
f) Others (specify)_____ _____					
7. How satisfied are you with the work produced by your group?					

Part II: Using the 5-point scale keyed below, please rate the Meeting on the following aspects:

Key: E - Excellent
V - Very Good
S - Satisfactory
F - Fair
P - Poor

Aspect	E	V	S	F	P
1. Organization of the activities					
2. Spacing of the work over the 10 days					
3. Competence of the Secretariat					
4. Communication between participants and programme staff					
5. Working facilities					
6. Competence of the resource persons					
7. Quality of the work output					
8. Working relationship among the participants					
9. Living accommodations					

Part III: Please answer the following questions frankly:

1. **What aspects of the programme did you find most satisfying? Please explain why.**

2. **What expectations of yours were only partially met or not met at all?**

3. **What would you suggest to improve future Meetings of this type?**

4. **Which three topics (or speakers) gave the best insights on in-service education?**

   a. _____
   b. _____
   c. _____

5. **What would you consider the weakest aspect of the Meeting?**

6. **If you were asked to manage a Meeting of this kind, how would you do it?**

7. Please comment on other aspects not covered by any of the previous items.

_____
_____
_____
_____
_____

Thank you for your cooperation!

The Evaluation Committee

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